

1A.

HYDROGEOCHEMICAL DATA FROM INVESTIGATION OF WATER QUALITY IN SEWERED AND UNSEWERED AREAS, SOUTHERN NASSAU COUNTY, LONG ISLAND, NEW YORK

By

N. M. Perlmutter and Ellis Koch

U. S. Department of the Interior
Geological Survey



LONG ISLAND WATER RESOURCES
BULLETIN LIWR-4

Prepared by the U. S. Geological Survey in cooperation with the
Nassau County Department of Public Works.

Published by the
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NASSAU COUNTY

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DEPARTMENT OF PUBLIC WORKS

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DEPARTMENT OF THE INTERIOR

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CONTENTS

	Page
Introduction.....	1
Collection and processing of the data.....	2
Related reports and investigations in the study area.....	3
Acknowledgments.....	3
References cited.....	4

ILLUSTRATIONS

Plate 1. Selected wells and streams in southern Nassau County, Long Island, New York, from which water samples were collected for chemical analyses, 1948-72.....	in pocket
Figure 1. Location of study area.....	2
Figure 2. Generalized section in central Nassau County showing principal aquifers and confining units.....	5

TABLES

Table 1. Summary of number of sampling points and chemical analyses by source and area.....	6
2. Chemical analyses of water from selected wells in the sewered area, southern Nassau County, Long Island, N.Y., 1952-72.....	7
3. Chemical analyses of water from selected wells in the unsewered area, southern Nassau County, Long Island, N.Y., 1948-71.....	20
4. Chemical analyses of water from streams in sewered and unsewered areas, southern Nassau County, Long Island, N.Y., 1966-71.....	32

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WATER QUALITY IN SEWERED AND UNSEWERED AREAS,
SOUTHERN NASSAU COUNTY, LONG ISLAND, NEW YORK

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INTRODUCTION

About 1,000 chemical analyses of ground-water and surface-water samples collected from 1948 to 1972 in a 180-square mile area of southern Nassau County (fig. 1) are tabulated in this report. The analyses are useful in planning and studying the development of water resources in the county. Obtained in a cooperative study of chemical quality of water (1966-72) by the U.S. Geological Survey and the Nassau County Department of Public Works, they represent water samples from ground-water-fed streams and confined and unconfined unconsolidated aquifers composed of gravel, sand, silt, and clay of Pleistocene and Late Cretaceous age. The analyses also represent one of the few modern regional compilations of hydrogeochemical data that show a side-by-side comparison of water quality before and after replacement of several hundred thousand cesspools by public sewers.

The sewered part of the study area consists of Nassau County Sewer District 2 and the village of Freeport (pl. 1). The presently (1972) unsewered part of the study area consists of Nassau County Sewer District 3, where sewer construction, now in progress, is scheduled for completion in 1983.

Information on potential improvement in the chemical quality of the water in the sewered area and degradation of water quality in the unsewered area is important in forecasting the continued availability of potable ground water, the only local source of supply for about 1½ million residents of Nassau County. Public water-supply systems, which serve most of the population, draw water mainly from the Magothy aquifer and to a small extent from the Lloyd and the upper glacial aquifers (fig. 2). In 1970, water from public-supply wells in the study area was pumped at a rate of about 140 million gallons per day.

Streams, ponds, and bays in southern Nassau County are used chiefly for boating, fishing, and swimming. No surface water is used for public supply in the county. A few streams and ponds and several well fields in the southeastern part of the study area, on land owned by New York City, have been used intermittently as minor reserve sources for the city's standby Ridgewood System (Perlmutter and Geraghty, 1963, p. 85-87) in Nassau County. This system, which supplies water to Kings and Queens Counties mainly during droughts, was last used in 1966.

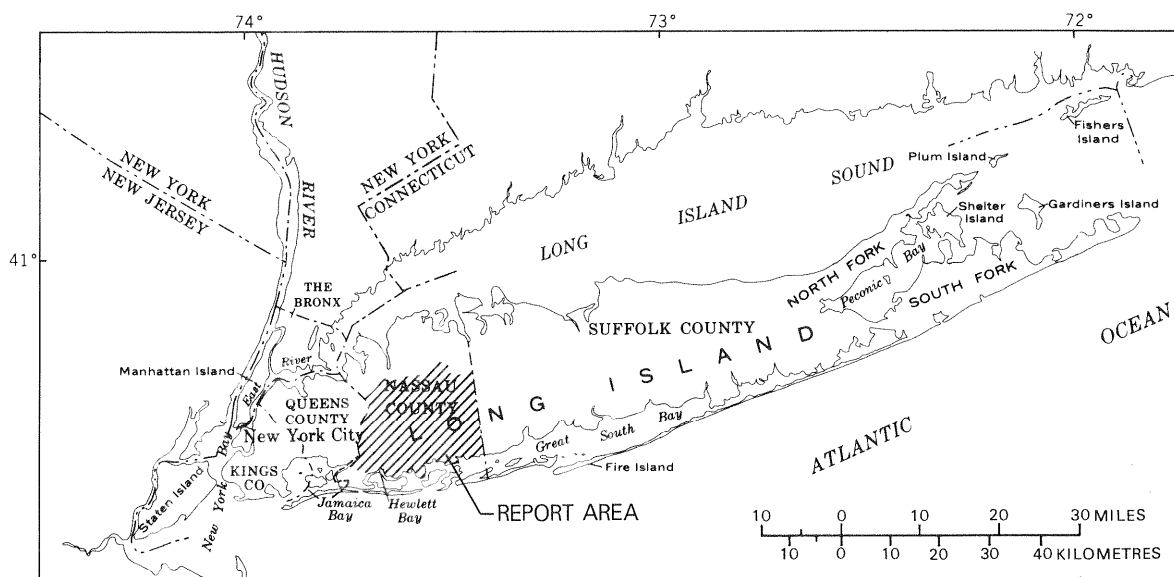


Figure 1.--Location of study area in southern Nassau County, Long Island, New York.

COLLECTION AND PROCESSING OF THE DATA

Depth of wells from which water samples were collected ranged from 10 to 800 feet below the land surface. Principal uses of the water from these wells were public supply, air conditioning, general domestic purposes, and lawn irrigation. Twenty 1½-inch diameter wells, ranging in depth from 15 to 76 feet, were installed during the investigation for long-term monitoring of the chemical quality of the water in the upper glacial aquifer in areas where shallow wells suitable for sampling were lacking. Selected wells and streams were generally sampled from 1 to 4 times per year to determine trends in concentrations of chemical constituents.

A summary of the number of sampling points and sources of water analyzed is given in table 1. Detailed chemical analyses of 814 samples of water from 373 wells screened chiefly in the upper glacial aquifer and the Magothy aquifer and 4 in the Lloyd aquifer are given in tables 2 and 3. From 12 to 26 physical and chemical parameters, including detergent, nitrogen, and phosphate contents, were determined for most of the water samples. Species of nitrogen are expressed in tables 2 and 3 as elemental nitrogen (N). Nitrate, however, is expressed for convenience both as the nitrate ion (NO_3^-) and as elemental nitrogen. Chemical analyses of 174 samples of water collected mainly during base flow from 22 stations and 14 streams are given in table 4.

Most of the analyses were made by personnel of the Nassau County Department of Health, under the direction of Maxim Lieber, and by the U.S. Geological Survey. Seventy-two analyses of ground water were made by private laboratories. Processing, tabulation, and statistical evaluation of the chemical analyses were made largely by computer, with the advice and the assistance of Brent Lowell of the U.S. Geological Survey.

RELATED REPORTS AND INVESTIGATIONS IN THE STUDY AREA

Primarily using the data in this report, the authors have prepared several short interpretive reports on water-quality problems in the study area. These reports discuss the effects of urbanization on stream quality (Koch, 1970), detergent and phosphate in ground water and streams (Perlmutter and Koch, 1971), and nitrate in ground water and streams (Perlmutter and Koch, 1972). Perlmutter and Lieber (1970) made a detailed study of dispersal of plating wastes and sewage contaminants in aquifers and streams in a small area in southeastern Nassau County, and Smith and Baier (1969) reported on nitrate in water from public-supply wells in Nassau County. A report by Harr (1971) listed nitrogen and phosphate contents of water from selected sources in Nassau and Suffolk Counties in May 1971.

ACKNOWLEDGMENTS

This report was prepared under the general supervision of R. J. Dingman, district chief, New York District, U.S. Geological Survey and under the direct supervision of Philip Cohen, former hydrologist-in-charge of the Long Island program. Appreciation is expressed to John H. Peters, former Commissioner, Nassau County Department of Public Works and to Dr. John Kinnaman, former Commissioner, Nassau County Department of Health for their support and to members of their departments, who assisted in the investigation.

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LONG ISLAND

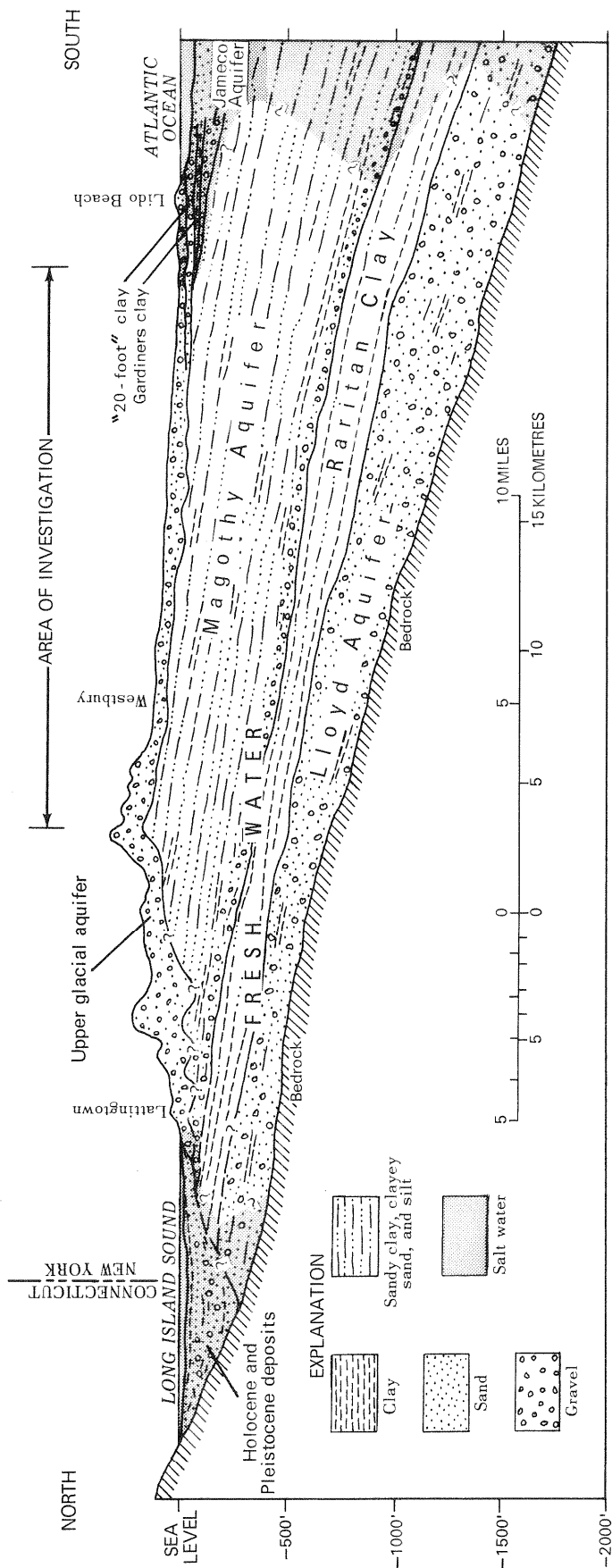


Figure 2.--Generalized section in central Nassau County showing principal aquifers and confining units (after Perlmutter and Geraghty, 1963, fig. 3).

Table 1.--Summary of number of sampling points and chemical analyses by source and area

SEWERED AREA

GROUND WATER			SURFACE WATER	
Aquifer	Number of wells	Number of chemical analyses	Number of streams	Number of chemical analyses
Upper glacial	137	364	--	--
Magothy	34	62	5	56
Lloyd	2	2	--	--
Subtotal	173	¹ 428	5	² 56

UNSEWERED AREA

Upper glacial	115	259	--	--
Magothy	83	125	9	118
Lloyd	2	2	--	--
Subtotal	200	³ 386	9	⁴ 118
Total	373	814	14	174

¹ 120 analyses, U.S. Geological Survey; 282 analyses, Nassau County Dept. of Health; 26 analyses, private laboratories.

² 15 analyses, U.S. Geological Survey; 41 analyses, Nassau County Dept. of Health.

³ 64 analyses, U.S. Geological Survey; 275 analyses, Nassau County Dept. of Health; 47 analyses, private laboratories.

⁴ 36 analyses, U.S. Geological Survey; 82 analyses, Nassau County Dept. of Health.

TABLE 2.--CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE SEWERED AREA,
SOUTHERN NASSAU COUNTY LONG ISLAND, N.Y., 1952-72

[CHEMICAL CONSTITUENTS, DISSOLVED-SOLIDS CONTENT, ALKALINITY, AND HARDNESS GIVEN IN
MILLIGRAMS PER LITER. LOCATION OF WELLS SHOWN ON PLATE 1. THE SEWERED PART OF THE
REPORT AREA INCLUDES NASSAU COUNTY SEWER DISTRICT 2 AND THE VILLAGE OF FREEPORT]

EXPLANATION

WELL NUMBER: ASSIGNED BY NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

LOCATION: FIRST PART OF THE NUMBER IS THE
LATITUDE AND SECOND PART IS THE LONGITUDE;
SEQUENTIAL NUMBER AFTER DECIMAL POINT
DISTINGUISHES MORE THAN ONE WELL AT THE
SAME LOCATION.

AQUIFER: 1, UPPER GLACIAL AQUIFER
4, MAGOTHY AQUIFER
6, LLOYD AQUIFER

USE OF WELL: 1, AIR CONDITIONING
2, DOMESTIC
3, IRRIGATION
4, INDUSTRIAL
5, PUBLIC SUPPLY
6, UNUSED
7, OBSERVATION
8, DESTROYED

MBAS: METHYLENE BLUE ACTIVE SUBSTANCE.

DISSOLVED SOLIDS: DETERMINED AS RESIDUE ON
EVAPORATION AT 180°C BY THE GEOLOGICAL
SURVEY AND AT 105°C BY THE NASSAU COUNTY
DEPARTMENT OF HEALTH AND PRIVATE LABORA-
TORIES.

ANALYST: 1, U.S. GEOLOGICAL SURVEY
2, NASSAU COUNTY DEPARTMENT OF HEALTH
3, PRIVATE LABORATORY

TABLE 2. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE SEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1952-72 --CONTINUED

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A DEPTH OF WELL U BELOW I LAND SUR- FACE R (FEET)	U TEM- PERA- TURE (°C)	SILICA (SiO ₂)	TOTAL IRON (FE)	MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO ₃)	ALKA- LITY AS CaCO ₃
10	404229N 734245.1	10 19 67	4	398	5 12	.....	.05	.00	.....	.....	.....	.....	17	14
14	404411N 734137.1	07 08 52	1	103	5 ..	.....	.03	.05	.....	.....	.....	.....	20	16
14	404411N 734137.1	09 15 59	1	103	5 ..	.....	.00	.00	.....	.....	.....	.....	29	24
14	404411N 734137.1	06 07 66	1	103	5 14	.....	.00	.....	.....	.....	.....	.....	.....	.....
14	404411N 734137.1	08 12 68	1	103	5 ..	17	.00	.00	.10	28	7.2	17	1.9	32
15	404427N 734149.1	07 08 52	1	101	5 ..	.....	.03	.05	.....	.....	.....	.....	30	25
15	404427N 734149.1	07 18 63	1	101	5 ..	.....	.00	.00	.....	.....	.....	.....	30	25
15	404427N 734149.1	06 07 66	1	101	5 16	16	.05	.01	.....	26	8.0	18	1.6	33
15	404427N 734149.1	08 08 68	1	101	5 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	404227N 734149.1	08 24 71	1	101	5 ..	10	.03	.00	.28	36	6.2	18	2.1	33
17	404437N 734023.1	10 26 67	4	465	5 11	.....	.05	.00	.....	.....	.....	.....	13	11
91	404351N 733812.1	11 12 58	1	82	5 ..	.....	.00	.00	.....	.....	.....	.....	15	12
91	404351N 733812.1	10 11 61	1	82	5 ..	.....	.11	.20	.....	.....	.....	.....	13	11
91	404351N 733812.1	01 07 65	1	82	5 ..	.....	.00	.75	.....	.....	.....	.....	11	9
97	404449N 733813.1	07 15 66	4	369	5 13	10	.03	.03	.....	2.7	1.3	5.8	.5	12
578	404456N 733913.1	11 09 70	4	407	5 12	.....	.14	.00	.....	.....	.....	.....	21	17
693	404229N 734243.1	10 19 60	1	98	5 ..	.....	.00	.00	.....	.....	.....	.....	23	19
693	404229N 734243.1	03 18 63	1	98	5 ..	.....	.00	.07	.....	.....	.....	.....	23	19
693	404229N 734243.1	11 01 68	1	98	5 13	.....	.02	.00	.....	.....	.....	.....	21	17
1086	403950N 734310.2	03 09 67	4	328	1 12	.....	.53	.00	.....	2.4	.....	.....	13	11
1086	403950N 734210.1	06 17 71	4	328	1 13	14	1.0	.06	.....	3.0	1.9	4.2	.8	10
1110	404039N 734200.1	06 01 66	1	27	7 14	8.5	.76	.05	.....	29	11	23	4.2	65
1110	404039N 734200.1	07 09 68	1	27	7 18	.....	.81	.00	.....	.....	.....	.....	43	35
1112	403935N 734209.2	06 01 66	1	24	7 13	11	.53	.05	.....	47	12	9.5	5.0	125
1114	403818N 734215.1	05 08 70	1	31	7 ..	.....	.....	.37	.....	.....	.....	.....	17	14
1116	403716N 734231.1	05 08 70	1	18	7 ..	.....	.32	.14	.....	.....	.....	.....	30	25
1128	404203N 733950.2	07 21 65	1	45	7 ..	10	.92	.13	.....	37	2.3	17	4.1	23
1129	404124N 733949.1	10 28 66	1	44	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
1129	404124N 733949.1	07 09 68	1	44	7 13	13	1.8	.20	.....	38	5.7	8.0	6.1	14
1130	404042N 733954.3	06 01 66	1	33	7 13	12	1.9	.92	.....	27	4.7	23	5.8	21
1130	404042N 733954.3	03 31 67	1	33	7 ..	.....	.....	.....	.....	.....	.....	.....	27	22
1130	404042N 733954.3	08 31 67	1	33	7 ..	.....	1.0	.....	2.7	.....	.....	.....	12	10
1130	404042N 733954.3	07 09 68	1	33	7 ..	3.4	.....	.....	.....	45	5.5	20	2.2	11
1130	404042N 733954.3	03 26 71	1	33	7 14	.....	.78	.22	1.0	.....	.....	.....	98	80
1131	404002N 733940.1	10 20 66	1	29	7 15	.....	.....	.14	.....	.....	.....	.....	23	19
1131	404002N 733940.1	07 09 68	1	29	7 ..	5.8	1.5	.21	.....	45	5.2	24	6.2	32
1132	403924N 733934.1	06 22 66	1	38	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
1132	403924N 733934.1	01 24 67	1	38	7 ..	.....	6.1	.24	.....	.....	.....	.....	33	27
1133	403835N 733935.1	02 17 65	1	24	7 14	6.7	.33	.21	.....	26	4.4	10	4.4	34
1133	403835N 733935.1	08 26 69	1	24	7 ..	.....	.....	.....	.....	.....	.....	.....	24	20
1133	403835N 733935.1	05 07 70	1	24	7 ..	.....	.16	.08	.....	.....	.....	.....	38	31
1139	404416N 733803.1	11 05 68	1	59	7 ..	.....	.08	.00	1.2	.....	.....	.....	15	12
1142	404232N 733747.4	06 06 66	1	35	7 15	7.7	.59	.02	.....	17	3.5	7.4	3.0	30
1142	404232N 733747.4	04 19 71	1	35	7 ..	.....	.56	.00	.....	.....	.....	.....	39	32
1142	404232N 733747.1	10 12 71	1	35	7 ..	.....	.45	.00	.30	.....	.....	.....	10	8
1143	404144N 733739.2	10 28 66	1	38	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
1143	404144N 733739.1	06 02 71	1	35	7 ..	.....	.44	.00	.....	.....	.....	.....	22	18
1144	404103N 733726.1	07 27 67	1	32	7 ..	11	.18	.15	2.2	22	3.6	9.4	4.2	12
1144	404103N 733726.1	08 13 68	1	32	7 14	.....	.02	.05	7. -	.....	.....	.....	11	9
1145	404032N 733724.1	07 26 66	1	28	7 ..	.....	.....	.08	.....	.....	.....	.....	51	42
1145	404032N 733724.1	08 09 68	1	28	7 ..	.....	.02	.00	5.9	.....	.....	.....	33	27
1146	404016N 733725.1	07 26 66	1	32	7 ..	.....	1.6	.00	.....	.....	.....	.....	47	39
1146	404016N 733725.1	08 09 68	1	32	7 12	.....	.04	.00	.....	.....	.....	.....	43	35
1147	403943N 733713.2	06 10 66	1	24	7 13	7.0	.77	.06	.....	23	4.5	4.7	2.7	18
1147	403943N 733713.2	07 11 68	1	24	7 ..	.....	.23	.00	2.9	.....	.....	.....	21	18
1148	403856N 733710.1	10 28 66	1	28	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
1148	403856N 733710.1	08 09 68	1	28	7 12	.....	.06	.00	4.8	.....	.....	.....	.....	.....
1162	404239N 733555.1	06 03 66	1	39	7 14	8.1	1.2	1.3	.....	16	4.9	9.8	4.5	51
1162	404239N 733555.1	07 26 67	1	39	7 ..	8.4	3.6	1.8	6.0	17	3.4	9.4	2.7	18
1163	404203N 733547.4	06 06 66	1	30	7 14	12	.53	1.6	.....	25	5.7	23	6.2	17
1163	404203N 733547.4	01 30 67	1	30	7 ..	.....	1.4	1.31	.....	.....	.....	.....	18	15
1163	404203N 733547.4	06 26 67	1	30	7 ..	.....	.....	.....	2.1	.....	.....	.....	.....	.....
1163	404203N 733547.4	06 27 67	1	30	7 11	12	.67	1.2	.....	20	3.5	27	6.1	20
1163	404203N 733547.4	12 15 67	1	30	7 14	.....	.27	1.3	1.4	.....	.....	.....	16	13
1163	404203N 733547.4	01 19 68	1	30	7 13	.....	.13	1.3	2.0	.....	.....	.....	15	12
1163	404203N 733547.4	04 08 68	1	30	7 12	.....	.04	1.1	1.2	.....	.....	.....	13	11
1163	404203N 733547.4	06 07 68	1	30	7 14	.....	.10	1.3	2.5	.....	.....	.....	.....	.....
1164	404112N 733533.2	12 10 70	1	40	7 ..	.....	.25	.00	.....	.....	.....	.....	18	15
1165	404036N 733526.2	06 03 66	1	42	7 14	6.6	1.5	.11	.....	33	7.9	14	3.7	78
1165	404036N 733526.2	07 11 68	1	42	7 14	9.8	7.5	3.6	.....	36	5.2	25	6.8	43
1166	404001N 733525.1	05 05 70	1	29	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
1167	403926N 733515.4	07 26 66	1	25	7 ..	.....	6.7	.00	.....	.....	.....	.....	24	20
1167	403926N 733515.4	04 25 67	1	25	7 12	.....	.53	.00	.52	.....	.....	.....	21	17
1167	403926N 733515.4	06 28 67	1	25	7 13	7.2	1.7	.....	.....	30	7.7	5.8	1.7	20
1167	403926N 733515.4	12 15 67	1	25	7 14	.....	.16	.05	.19	.....	.....	.....	17	14

SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	AL- BUMIN- OID NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NI- TRATE NI- TROGEN (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO PHOS- PHATE (PO4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHOS/CM AT 25°C)	PH	A N A L Y S T
.....	15	.....	.....	.00	.00	6.2	27	.....	.....	.00	123	58	.....	.....	5.8	2
.....	15	.1	.02	.01	.00	11	49	.....	.....	.....	.....	89	.....	.....	5.9	2
.....	18	.1	.00	.00	.00	15	66	.....	.....	.02	.....	88	.....	.....	5.8	2
.....	17	.....	.....	.....	.....	13	58	.....	.....	.06	261	.....	.....	350	5.9	2
43	20	.1	.....	.....	.....	9.7	43	.07	.....	.12	203	100	74	324	6.7	1
.....	19	.1	.02	.01	.00	13	58	.....	.....	.....	.....	93	.....	.....	5.9	2
.....	20	.....	.00	.00	.00	14	62	.....	.....	.04	265	106	.....	.....	6.0	2
33	21	.1	.20	.00	.00	9.7	44	.04	.01	.1	207	98	71	298	6.2	1
.....	16	.....	.....	.....	.....	10	44	.....	.....	.00	233	88	.....	.....	.....	2
54	27	.1	.....	.....	.0	.1	49	.0	.....	.12	218	115	88	347	6.4	1
.....	14	.....	.....	.00	.00	5.8	26	.....	.....	.00	129	56	.....	.....	6.1	2
.....	54	.1	.00	.00	.00	2.2	9.7	.....	.....	.....	183	60	.....	.....	6.0	2
.....	44	.....	.01	.00	.00	2.2	9.7	.....	.....	.00	188	54	.....	.....	5.7	2
.....	44	.....	.00	.00	.00	.8	3.5	.....	.....	.00	172	70	.....	.....	5.6	2
.4	5.0	.1	.....	.....	.....	1.9	8.4	.....	.....	.00	44	12	2	52	6.8	1
.....	12	.....	.00	.00	.00	7.7	34	.04	.00	.00	103	42	.....	150	6.2	2
.....	20	.....	.....	.13	.00	13	58	.....	.....	.05	.....	108	.....	.....	6.2	2
.....	20	.....	.01	.10	.00	12	53	.....	.....	.00	244	106	.....	.....	6.0	2
.....	28	.....	.01	.00	.00	11	49	.....	.....	.00	280	99	.....	.....	6.0	2
.....	6.5	.....	.....	.00	.00	.2	.9	.....	.....	.....	23	12	.....	.....	5.9	3
12	4.7	.0	.10	.00	.00	.0	.0	.03	.....	.03	51	15	7	61	6.1	1
54	34	.1	.18	.00	.00	3.6	16	.01	.01	.1	234	119	66	372	6.7	1
.....	17	.....	.....	.....	.....	1.2	5.3	.....	.....	.07	235	42	.....	.....	6.5	2
60	12	.1	.....	.35	.00	3.2	14	.03	.01	.00	265	167	64	379	6.5	1
15	61	.....	.....	.....	.....	.0	.....	.05	.....	.39	302	152	.....	520	6.9	2
71	24	.....	.....	.....	.....	5.2	23	.05	.00	.17	232	122	.....	330	6.2	2
67	12	.0	.....	.....	.....	9.3	41	.....	.....	.....	223	102	83	316	6.3	1
.....	11	.....	.....	.....	.....	2.5	11	.....	.....	.06	.....	.....	.....	250	6.4	2
65	21	.0	.....	.11	.....	9.9	45	.04	.....	.10	236	118	107	335	6.0	1
59	28	.2	.00	.00	.01	7.0	31	.04	.01	.2	237	87	70	343	6.1	1
.....	60	.....	.....	.....	.....	2.0	8.9	.....	.....	.14	292	104	.....	425	6.0	2
.....	152	.....	.06	.24	.00	9.2	41	.00	.00	.00	572	180	.....	800	6.1	2
50	72	.0	.....	.14	.....	5.5	24	.07	.....	.13	327	135	126	434	6.1	1
32	30	.....	.....	.....	.00	.6	2.6	.08	.03	.07	166	80	.....	260	6.1	2
.....	18	.....	.07	1.10	.00	9.2	41	.01	.01	.39	261	118	.....	360	6.7	2
50	56	.0	.....	2.3	.....	10	46	.04	.....	.23	305	134	108	454	6.3	1
.....	18	.....	.....	.....	.....	.1	.4	.....	.....	.18	175	.....	.....	250	6.3	2
.....	16	.....	.03	.14	.00	.0	.....	.02	.02	.02	196	74	.....	270	6.0	2
44	8.0	.1	.....	.....	.....	5.9	26	.03	.....	.5	162	83	55	240	6.6	1
35	34	.....	.....	.....	.....	1.8	8.0	.04	.00	.09	182	82	.....	260	6.4	2
36	28	.....	.....	.....	.....	3.0	13	.04	.00	.11	185	84	.....	270	6.5	2
31	15	.....	.....	.....	.....	3.3	15	.....	.00	.25	109	72	.....	182	6.3	2
12	22	.1	.05	.00	.00	2.3	10	.04	.00	.00	118	57	32	168	6.5	1
93	88	.....	.....	.14	.00	11	50	.06	.03	.05	508	226	.....	650	6.3	2
13	11	.....	.03	.10	.00	.1	.9	.29	.04	.00	67	18	.....	90	6.4	2
.....	16	.....	.....	.....	.....	6.0	27	.....	.....	.05	.....	.....	.....	250	6.7	2
74	24	.....	.03	.05	.00	5.6	25	.06	.00	.00	259	116	.....	330	6.1	2
48	20	.1	.....	.....	.....	3.6	16	.06	.00	.1	155	70	60	239	6.0	1
56	18	.....	.....	.....	.....	4.9	22	.03	.00	.00	189	86	.....	260	6.6	2
.....	15	.....	.....	.35	.00	1.5	6.6	.....	.....	.07	210	84	.....	260	6.3	2
42	20	.....	.....	.....	.....	7.7	34	.03	.03	.05	201	80	.....	255	6.4	2
.....	13	.....	.....	.20	.00	3.6	16	.....	.....	.11	203	84	.....	260	6.2	2
54	24	.....	.....	.....	.....	7.6	34	.08	.05	.00	229	92	.....	315	6.1	2
44	10	.1	.....	.....	.....	2.5	11	.05	.02	.00	134	76	61	196	6.0	1
29	16	.....	.....	.....	.....	4.1	18	.....	.....	.....	205	92	.....	250	6.6	2
.....	15	.....	.....	.....	.....	3.4	15	.....	.....	.11	.....	.....	.....	200	6.6	2
49	16	.....	.....	.....	.....	3.5	15	.11	.11	.02	199	74	.....	235	6.3	2
30	10	.1	.25	.69	.05	1.8	7.8	.03	.03	.1	137	60	18	221	6.7	1
30	18	.0	.....	.....	.....	5.4	24	.08	.01	.1	146	56	42	219	6.4	1
40	27	.2	.27	1.4	.00	13	58	.04	.01	.6	225	86	72	343	5.8	1
.....	27	.....	.07	1.5	.00	12	53	.02	.01	.56	226	70	.....	320	5.8	2
.....	23	.....	.03	1.0	.00	11	49	.....	.....	.44	226	.....	.....	316	5.9	2
41	25	.1	.....	.....	.....	11	49	.01	.....	.6	202	64	48	325	6.0	1
.....	26	.....	.....	.....	.....	10	44	.04	.04	.24	229	80	.....	338	6.2	2
.....	25	.....	.....	.....	.....	9.4	42	.03	.00	.17	237	82	.....	340	6.1	2
.....	23	.....	.03	.60	.00	12	53	.02	.02	.02	222	74	.....	330	6.0	2
.....	26	.1	.03	.43	.01	13	58	.05	.02	.11	275	94	.....	360	6.5	2
40	32	.....	.13	.20	.00	7.0	31	.04	.03	.10	238	96	.....	320	6.3	2
30	22	.1	.....	.00	.01	3.8	17	.04	.00	.1	196	115	51	303	6.6	1
61	33	.0	.....	.....	.....	11	50	.04	.....	.38	270	112	76	414	6.3	1
.....	24	.....	.....	.....	.....	5.0	22	.....	.00	.03	.....	82	.....	260	6.0	2
.....	20	.....	.....	.00	.00	1.4	6.2	.....	.....	.02	246	138	.....	330	5.7	2
.....	15	.....	.02	.14	.00	2.8	12	.08	.02	.04	172	94	.....	270	6.2	2
48	16	.1	.....	.....	.....	.....	.....	.00	.....	.....	170	106	90	274	6.1	1
.....	19	.....	.....	.....	.....	2.6	12	.00	.00	.00	207	110	.....	300	6.2	2

TABLE 2. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE SEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1952-72 --CONTINUED

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A DEPTH Q OF WELL U BELOW I LAND F SUR- FACE R (FEET)	U TEM- S PERA- TURE (°C)	SILICA (SiO2)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	ALKA- LITY AS CaCO3
1167	403926N 733515.4	04 08 68	1 25	7 12	.....	.34	.00	.12	.....	.....	.....	.....	18	14
1167	403926N 733515.4	06 28 68	1 25	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	...	...
1167	403926N 733515.4	07 10 68	1 25	7 14	.....	1.1	.00	.12	.....	.....	.....	.....	18	15
1167	403926N 733515.4	10 09 68	1 25	7 ..	.....	.32	.00	.08	.....	.....	.....	.....	15	12
1167	403926N 733515.4	03 06 69	1 25	7 12	.....	.08	.00	.1	.....	.....	.....	.....	23	19
1167	403926N 733515.4	06 11 69	1 25	7 13	5.7	.....	.00	.....	30	6.0	11	1.3	18	15
1167	403926N 733515.4	01 29 70	1 25	7 ..	.....	.18	.00	.....	.....	.....	.....	.....	20	16
1167	403926N 733515.4	10 15 70	1 25	7 17	.....	.04	.00	.09	.....	.....	.....	.....	16	13
1168	403849N 733508.1	07 26 66	1 28	7 ..	.....	4.64	.14	.....	.....	.....	.....	.....	24	20
1169	403807N 733502.1	07 26 66	1 24	7 ..	.....	17	.52	.....	.....	.....	.....	.....	144	118
1300	404557N 734026.1	08 15 67	4 375	3 ..	.....	.39	.00	.....	.....	.....	.....	.....	29	24
1402	403952N 733616.2	06 16 66	1 29	5 12	9.7	.39	1.5	.....	26	4.2	14	3.6	20	16
1427	404057N 734058.1	05 27 66	1 33	7 13	10	1.2	.76	.....	21	6.0	12	2.8	18	15
1427	404057N 734058.1	10 03 67	1 33	7 14	.....	.32	.55	.....	.....	.....	.....	.....	...	11
1427	404057N 734058.1	07 09 68	1 33	7 14	11	4.1	.57	.....	28	4.7	21	4.0	20	16
1428	404003N 734056.1	07 27 66	1 24	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	...	...
1428	404003N 734056.1	10 17 66	1 24	7 14	.....	.18	.41	.....	.....	.....	.....	.....	23	19
1428	404003N 734056.1	01 24 67	1 24	7 13	16	.55	.74	4.0	14	3.8	18	10	20	...
1428	404003N 734056.1	01 24 67	1 24	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	...	...
1428	404003N 734056.1	06 29 67	1 24	7 13	14	.82	.65	.....	18	3.8	46	9.3	18	15
1428	404003N 734056.1	06 29 67	1 24	7 ..	.....	.....	.....	4.7	.....	.....	.....	.....	...	...
1428	404003N 734056.1	11 15 67	1 24	7 13	.....	.27	.37	3.4	.....	.....	.....	.....	15	12
1428	404003N 734056.1	04 08 68	1 24	7 11	.....	.56	.75	2.8	.....	.....	.....	.....	15	12
1428	404003N 734056.1	05 27 68	1 24	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	...	...
1428	404003N 734056.1	07 10 68	1 24	7 13	.....	.37	.79	9.5	.....	.....	.....	.....	23	19
1428	404003N 734056.1	10 09 68	1 24	7 14	.....	.12	.55	4.2	.....	.....	.....	.....	15	12
1428	404003N 734056.1	03 06 69	1 24	7 12	.....	.25	.83	3.2	.....	.....	.....	.....	16	13
1428	404003N 734056.1	01 29 70	1 24	7 ..	.....	.34	.79	.....	.....	.....	.....	.....	16	13
1428	404003N 734056.1	10 16 70	1 24	7 14	.....	.02	.14	2.4	.....	.....	.....	.....	22	18
1428	404003N 734056.1	05 18 71	1 22	7 12	13	.32	.66	.....	21	3.4	110	10	16	13
1429	403920N 734107.1	05 27 66	1 24	7 16	12	1.3	1.4	.....	23	5.0	10	9.4	45	37
1429	403920N 734107.1	06 05 69	1 24	7 12	.....	.25	.71	5.7	.....	.....	.....	.....	12	10
1435	404108N 733854.1	10 17 66	1 34	7 14	.....	1.7	.95	.....	.....	.....	.....	.....	5	4
1435	404108N 733854.1	07 12 68	1 34	7 14	11	2.3	.67	.....	26	4.6	20	3.0	21	17
1436	404030N 733912.1	08 13 68	1 33	7 ..	.....	.16	7.1	.....	.....	.....	.....	.....	70	57
1438	404008N 733805.1	06 15 66	1 28	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	40	33
1438	404008N 733805.1	06 15 66	1 28	7 ..	.....	2.3	.09	.....	.....	.....	.....	.....	...	...
1438	404008N 733805.1	07 09 68	1 28	7 14	6.1	1.2	.03	.....	29	4.0	8.1	2.1	25	20
1439	403926N 733816.1	06 02 66	1 29	7 13	8.2	1.5	.04	.....	32	7.5	6.8	4.0	14	12
1439	403926N 733816.1	07 11 68	1 29	7 14	8.2	9.5	.05	.....	30	4.5	7.0	3.5	18	15
1440	403846N 733818.2	10 20 66	1 30	7 16	.....	.....	.....	.....	.....	.....	.....	.....	59	48
1440	403846N 733818.2	07 11 68	1 30	7 ..	4.9	2.7	3.3	.....	29	3.7	10	1.8	55	45
1441	403806N 733813.1	10 20 66	1 23	7 16	.....	.05	2.7	.....	.....	.....	.....	.....	39	32
1443	403950N 733613.2	09 15 69	1 24	7 ..	.....	.02	.00	.....	.....	.....	.....	.....	94	69
1444	403903N 733613.2	10 17 66	1 19	7 16	.....	.05	.30	.....	.....	.....	.....	.....	61	50
1444	403903N 733613.2	09 15 69	1 19	7 ..	.....	.02	.37	.....	.....	.....	.....	.....	33	27
1495	403952N 733615.1	10 18 62	1 31	5 ..	.....	.18	.00	.....	.....	.....	.....	.....	17	14
1495	403952N 733615.1	09 25 64	1 31	5 ..	.....	.00	1.6	.....	.....	.....	.....	.....	26	21
1601	404046N 733546.1	03 06 69	4 580	5 ..	.....	.53	.00	.....	.....	.....	.....	.....	5	4
1602	404029N 733937.1	07 15 66	4 495	5 13	8.4	.26	.04	.....	1.2	.7	4.8	.5	5	4
1625	404040N 734334.1	05 07 70	1 37	7 ..	.....	.14	.00	.....	.....	.....	.....	.....	41	34
1626	403959N 734340.1	06 14 66	1 23	7 14	9.7	1.2	1.1	.....	37	3.6	9.8	8.9	44	36
1626	403959N 734340.1	07 16 71	1 23	7 13	7.2	.37	.....	.....	19	2.2	6.2	5.0	29	24
1627	403910N 734327.1	10 20 66	1 75	7 17	.....	.....	.....	.....	.....	.....	.....	.....	200	160
1628	403803N 734325.1	05 07 70	1 37	7 ..	.....	.18	.67	.....	.....	.....	.....	.....	74	61
1802	404532N 734209.1	06 27 69	6 691	5 ..	.....	.00	.00	.....	.....	.....	.....	.....	11	9
1818	404532N 734210.1	08 01 67	1 229	1 ..	.....	.05	.00	.....	.....	.....	.....	.....	39	32
1818	404532N 734210.1	10 03 67	1 229	1 ..	.....	.02	.00	.....	.....	.....	.....	.....	37	30
1818	404532N 734210.1	08 06 68	1 229	1 ..	.....	.06	.00	.72	.....	.....	.....	.....	27	22
1858	404527N 734138.1	08 01 67	1 104	1 ..	.....	.02	.00	.....	.....	.....	.....	.....	74	61
1958	404427N 734149.2	07 23 69	6 727	5 ..	.....	.00	.00	.....	.....	.....	.....	.....	6	5
2112	404319N 733753.1	10 15 62	1 68	4 ..	.....	.02	.00	.....	.....	.....	.....	.....	27	22
2112	404319N 733753.1	07 14 66	1 68	4 ..	.....	.....	.....	.....	.....	.....	.....	.....	...	13
2112	404319N 733753.1	07 14 66	1 68	4 14	9.0	.00	.00	.....	17	3.2	11	1.5	18	15
2112	404319N 733753.1	07 18 68	1 68	4 14	.....	.08	.00	.12	.....	.....	.....	.....	...	...
2115	404107N 734328.1	05 17 54	1 87	5 ..	.....	.30	.00	.....	.....	.....	.....	.....	24	20
2115	404107N 734328.1	11 18 63	1 87	5 ..	.....	.73	.17	.....	.....	.....	.....	.....	30	25
2115	404107N 734328.1	06 07 66	1 87	5 13	11	.36	.13	.....	22	5.4	20	4.2	41	34
2115	404107N 734328.1	07 30 68	1 87	5 14	.....	.48	.00	.....	.....	.....	.....	.....	30	...
2365	404152N 733813.1	10 24 62	1 50	3 ..	.....	.02	.....	.....	.....	.....	.....	.....	22	18
2399	404431N 733826.1	06 19 63	1 87	1 16	.....	.....	.....	.....	.....	.....	.....	.....	6	5
2399	404431N 733826.1	07 20 66	1 87	1 ..	.....	.....	.....	.....	.....	.....	.....	.....	...	...
2399	404431N 733826.1	07 20 66	1 87	1 18	12	.01	.05	.....	20	4.0	13	2.7	7	6
2399	404431N 733826.1	07 17 68	1 87	1 ..	.....	.16	.05	.14	.....	.....	.....	.....	6	5
2413	404124N 734209.1	06 13 70	4 508	5 14	.....	.06	.00	.00	.....	.....	.....	.....	9	7

SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	AL- BUMIN- OIDE NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NI TRATE (NO3)	TOTAL PHOS- PHATE (PD4)	ORTHO PHOS- PHATE (PD4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHOS/CM AT 25°C)	PH	A N A L Y S T
.....	16	....	.02	.20	.00	2.8	12	.05	.00	.00	154	92	....	255	6.2	2
.....	.....	....	.02	.19	.0	....	....	....	.06	....	.....	....	....	.....	....	2
52	16	....	....	....	....	3.4	15	.11	....	.00	.....	106	....	285	5.9	2
66	18	....	....	....	....	3.3	15	.02	.02	.00	206	102	....	275	6.0	2
78	30	.1	.05	.10	.00	4.1	18	.00	.00	.04	236	124	....	340	5.8	2
67	30	....	....	....	....	2.9	13	.02	.00	.02	197	100	34	293	6.1	1
83	39	....	....	....	....	3.1	14	.04	.00	.03	285	144	....	310	6.2	2
51	22	....	....	.20	.00	3.7	16	.05	.00	.04	190	94	....	240	6.3	2
.....	17	....	....	.00	.00	.4	1.7	....	....	.05	152	66	....	220	5.9	2
.....	2550	....	....	.35	.00	.2	.9	....	....	.05	10300	1060	....	.....	6.8	2
.....	6.2	....	.00	.00	.00	1.4	6.2	....	....	.00	70	28	14	.....	7.0	2
55	18	.0	.00	.62	.01	5.4	24	.21	.00	.3	177	82	66	276	6.1	1
36	23	.1	....	....	....	5.2	23	.02	.00	.1	180	77	62	247	6.2	1
.....	40	....	....	....	....	5.3	23	....	.01	.0	254	88	....	330	6.9	2
46	43	.0	....	.53	....	6.3	28	.04	....	.09	222	90	73	343	6.3	1
.....	116	....	....	....	....	2.1	9.3	....	....	.04	.....	....	....	440	7.0	2
.....	33	....	.07	.3	.00	1.6	7.1	.12	.12	.19	196	54	....	290	7.1	2
32	38	.1	....	....	....	2.5	11	.02	.00	.1	.....	50	34	268	6.2	1
.....	.....	....	....	.35	.00	....	....	....	....	....	174	....	....	.....	....	2
36	82	.1	....	....	....	2.3	10	.02	....	.1	230	60	46	427	6.1	1
.....	.....	....	.02	.18	.00	....	....	....	.01	....	.....	....	....	.....	....	2
.....	64	....	.02	.11	.00	3.2	14	.04	.02	.04	209	59	....	369	6.1	2
.....	58	....	.02	.25	.00	2.9	13	.04	.03	.02	201	60	....	315	6.4	2
.....	16	....	....	....	....	3.1	14	.02	.02	.14	158	....	....	230	6.2	2
26	138	....	....	....	....	4.8	21	....	....	.03	395	78	....	650	5.9	2
31	120	....	....	....	....	5.0	22	.00	.00	.05	359	68	....	510	6.0	2
22	99	.1	.06	.14	.00	3.6	16	.03	.03	.05	261	80	....	440	6.0	2
32	190	....	....	....	....	3.9	17	.09	.03	.04	457	94	....	680	6.1	2
26	186	....	....	.12	.00	5.4	24	.06	.06	.09	456	88	....	750	6.0	2
35	190	.0	....	.02	.01	3.4	15	.00	....	.03	436	66	53	778	6.2	1
62	11	.1	....	....	....	1.4	6.1	.03	.00	.1	175	78	41	276	6.3	1
26	124	.2	.01	.00	.00	3.6	16	.15	.00	.04	314	76	....	550	6.0	2
.....	15	....	.06	.02	.00	10	44	.07	.06	.11	217	70	....	290	5.3	2
70	29	.1	....	.54	....	4.3	19	.00	....	.12	204	84	67	336	6.0	1
118	26	....	....	....	....	5.6	25	.02	.04	.09	331	172	....	500	6.6	2
.....	16	....	....	....	....	6.6	29	....	....	.05	.....	108	....	280	7.1	2
.....	.....	....	....	....	....	....	....	....	....	....	.....	....	....	280	6.5	1
61	12	.0	....	....	....	2.3	10	.03	....	.05	152	89	68	245	6.3	1
75	18	.1	.00	.00	.00	3.6	16	.05	.01	.00	195	111	100	289	6.0	1
65	18	.0	....	....	....	3.6	16	.00	....	.08	175	94	78	277	6.2	1
.....	29	....	.11	4.0	.00	8.9	39	.03	.01	.29	244	120	....	360	6.1	2
43	14	.0	....	4.2	....	7.0	31	.04	....	.19	172	88	42	294	6.7	1
.....	19	....	.29	4.8	.00	4.4	20	.04	.03	.54	.....	62	....	285	5.9	2
44	19	....	....	....	....	11	49	....	.03	.41	.....	136	....	350	6.9	2
.....	17	....	.84	.08	.00	.6	2.7	.06	.02	.75	.....	72	....	300	6.5	2
76	19	....	....	....	....	.9	4.0	....	.05	.53	208	88	....	280	6.4	2
.....	17	....	.03	.90	.00	9.2	41	....	....	.78	211	84	....	.....	5.4	2
.....	20	....	.03	1.4	.00	8.8	39	....	....	.61	220	84	....	.....	5.6	2
.....	4.0	....	....	.00	....	.0	.1	....	....	.00	21	6	....	40	5.3	1
5.4	5.0	.1	....	....	....	.0	.1	....	....	....	30	6	2	34	6.1	1
43	44	....	....	....	....	5.4	24	.05	....	.05	220	36	....	360	6.3	2
58	24	.0	.00	1.01	.00	2.7	12	.17	.01	.2	190	108	72	312	6.5	1
39	8.0	.0	.12	.00	.0	.6	2.6	.71	....	.03	118	56	33	176	6.8	1
.....	116	....	.19	.11	.00	.0	.7	.04	.03	.16	825	580	....	1150	6.3	2
38	28	....	....	....	....	1.8	8.0	.05	....	.13	240	126	....	350	7.0	2
.....	5.8	....	....	.00	.00	.1	.5	....	....	.00	50	14	....	55	5.9	2
.....	23	....	.00	.08	.00	2.3	10	....	.03	.00	.....	65	....	225	6.7	2
.....	22	....	....	....	....	2.4	11	....	.00	.00	178	67	....	220	7.3	2
12	25	....	....	....	....	2.9	13	.03	.00	.03	166	68	....	225	6.5	2
.....	24	....	.00	.07	.00	2.0	8.9	....	.06	.00	198	112	....	315	6.7	2
.....	5.8	....	....	.00	....	.0	.2	....	....	.00	30	8	....	50	5.8	2
.....	20	.6	....	....	.01	2.8	12	....	....	.00	105	51	....	.....	6.0	2
.....	.....	....	.01	.00	.00	....	....	....	.10	.00	.....	....	....	.....	....	2
31	14	.0	....	....	....	3.6	16	....	....	....	124	56	40	184	6.2	1
.....	21	....	....	....	....	4.2	18	.04	.03	.00	.....	64	....	218	6.2	2
.....	17	.1	.00	.00	.00	7.6	34	....	....	....	.....	66	....	.....	5.3	2
.....	27	....	.02	.20	.00	3.6	16	....	....	.04	213	86	....	.....	6.0	2
40	29	.2	.15	.27	.00	1.9	8.5	.06	.01	.1	186	77	44	283	6.4	1
.....	40	....	.02	.11	.00	4.2	18	....	....	.04	241	92	....	330	6.1	2
.....	12	.0	....	....	.01	4.2	18	....	....	.01	100	61	....	.....	6.0	3
.....	.....	....	....	....	....	....	....	....	....	.00	.....	....	....	.....	5.3	2
.....	.....	....	.01	.00	.00	....	....	....	.04	.00	.....	64	....	.....	....	2
39	20	.0	....	....	....	5.0	22	....	....	....	159	66	61	229	5.7	1
28	32	....	....	....	....	7.7	34	....	.02	.00	225	80	....	272	5.7	2
9.0	7.4	....	.00	.00	.00	.1	.4	.00	.00	.02	64	12	....	60	6.0	2

TABLE 2. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE SEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1952-72 --CONTINUED

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A DEPTH Q OF WELL U BELOW I LAND F SUR- E FACE R (FEET)	U TEM- S PERA- E TURE (°C)	SILICA (SI02)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	ALKA- LITY AS CAC03			
2414	404124N	734209.1	09 16 53	1	89	5	..	.....	.00	.00	.....	.....	12	10	
2414	404124N	734209.1	03 16 63	1	89	5	..	.....	.00	.10	.....	.....	11	9	
2414	404124N	734209.1	06 07 66	1	89	5	..	.....	.....	.....	.....	.....	.....	.....
2414	404124N	734209.1	07 27 67	1	89	5	13	14	.04	.12	.02	22	5.7	15	2.6	11	9
2414	404124N	734209.1	11 01 68	1	89	5	..	.....	.05	.00	.....	.....	.....	12	10
2414	404124N	734209.1	06 05 69	1	89	5	13	14	.00	.00	23	5.2	14	2.7	16	13
2414	404124N	734209.1	08 26 70	1	89	5	..	11	.04	.03	21	5.4	13	2.5	12	10
2487	404546N	733905.1	11 07 68	4	338	5	11	.....	.05	.00	.....	.....	.....	33	27
2565	404434N	733940.1	11 09 68	4	405	5	11	.....	.00	.00	.....	.....	.....	22	18
2578	404038N	734312.1	05 01 52	1	93	5	..	.....	.85	.05	.....	.....	.....	37	30
2578	404038N	734312.1	11 01 61	1	93	5	..	.....	.22	.00	.....	.....	.....	60	49
2578	404038N	734312.1	06 16 66	1	93	5	14	10	.15	.10	43	8.2	23	13	45	37
2578	404038N	734312.1	08 29 67	1	93	5	..	.....	.79	.00	.....	.....	.....	39	32
3081	404028N	733744.1	10 31 62	1	60	3	..	.....	.48	.....	.....	.....	.....	17	14
3081	404028N	733744.1	06 30 66	1	60	3	13	9.904	21	4.9	8.9	2.4	11	9
3081	404028N	733744.1	06 30 66	1	60	3	..	.....	.....	.....	.....	.....	.....	.....	.....
3081	404028N	733744.1	10 31 67	1	60	3	15	.....	.18	.55	.....	.....	.....	10	8
3081	404028N	733744.1	08 06 68	1	60	3	12	.....	.10	.00	.06	.....	.....	11	9
3081	404028N	733744.1	06 04 69	1	60	3	12	9.4	.02	.00	26	5.8	9.3	2.0	12	10
3185	404412N	733847.1	07 15 66	4	463	5	13	9.9	.02	.03	6.8	3.0	9.0	.9	12	10
3327	404038N	734312.2	04 01 69	4	451	5	..	.....	.30	.00	.....	.....	.....	7	6
3603	404248N	734023.1	04 23 68	4	493	5	11	.....	.06	.00	.....	.....	.....	9	7
3605	404153N	734059.1	06 03 70	4	440	5	14	.....	.37	.00	.00	.....	.....	7	6
3673	404502N	734023.1	07 15 66	4	428	5	13	11	.01	.02	11	6.9	9.0	1.2	15	13
3673	404502N	734024.1	08 25 70	4	428	5	..	10	.27	.01	21	12	15	1.4	20	16
3673	404502N	734024.1	08 24 71	4	428	5	..	11	.22	.05	21	12	14	1.5	24	20
3722	404048N	733547.1	06 06 52	4	80	5	..	.....	.03	.08	.....	.....	.....	7	6
3722	404048N	733547.1	01 29 62	4	80	5	..	.....	.00	.40	.....	.....	.....	26	21
3722	404048N	733547.1	06 16 66	4	80	5	13	9.0	.03	1.4	25	4.0	22	5.9	21	17
3722	404048N	733547.1	08 12 68	4	80	5	..	.....	.14	.87	.....	.....	.....	20	16
3733	404628N	733831.1	01 08 70	4	455	5	12	.....	.....	.00	.....	.....	.....	12	10
3832	404048N	733545.1	06 06 52	4	90	5	..	.....	.03	.05	.....	.....	.....	4	3
3832	404048N	733545.1	03 14 63	4	90	5	..	.....	.00	1.1	.....	.....	.....	27	22
3832	404048N	733545.1	07 18 68	4	90	5	..	.....	.25	.71	.....	.....	.....	9	7
3867	403911N	734327.1	07 15 71	4	517	7	14	6.6	4.5	.00	2.0	1.1	4.8	1.1	15	12
3881	404321N	734021.1	03 20 69	4	470	5	..	.....	.00	.....	.....	.....	.....	11	9
4057	404411N	733813.1	07 20 66	1	70	6	14	.....	.15	.04	.....	.....	.....	15	12
4057	404411N	733813.1	07 20 66	1	70	6	..	.....	.....	.....	.....	.....	.....	17	14
4057	404411N	733813.1	07 17 68	1	70	6	14	.....	.10	.00	.....	.....	.....	32	26
4077	404323N	734138.1	02 14 55	1	90	5	..	.....	.00	.00	.....	.....	.....	.....	.....
4077	404323N	734138.1	08 19 68	1	90	5	..	.....	.....	.....	.....	.....	.....	.....	.....
4215	404633N	733758.1	09 05 67	1	104	6	..	.....	.07	.00	.....	.....	.....	.....	.....
4243	404542N	734151.1	05 18 71	1	255	5	..	19	.30	.00	17	8.4	7.2	1.4	52	43
4390	404514N	734124.1	06 01 54	1	105	5	..	.....	.15	.00	.....	.....	.....	16	13
4390	404514N	734124.1	04 23 63	1	105	5	..	.....	.00	.00	.....	.....	.....	29	24
4390	404514N	734124.1	06 22 66	1	105	5	..	.....	.00	.00	.....	.....	.....	32	26
4394	404001N	734019.1	08 16 62	4	175	5	..	.....	2.6	.00	.....	.....	.....	.....	4
4394	404001N	734019.1	08 29 67	4	175	5	..	.....	1.7	.17	.....	.....	.....	10	8
4623	404722N	733948.1	05 21 71	4	498	5	13	12	.30	.00	8.0	4.3	5.5	.8	33	27
5155	404237N	734204.1	06 09 55	1	90	5	..	.....	.1	.00	.....	.....	.....	17	14
5155	404237N	734204.1	04 23 63	1	90	5	..	.....	.00	.00	.....	.....	.....	9	7
5155	404237N	734204.1	07 31 68	1	90	5	..	.....	.06	.00	.....	.....	.....	17	14
5313	403947N	734316.0	07 15 71	4	248	1	..	14	.75	.08	4.0	2.5	4.0	.8	12	6
5440	404354N	734047.1	11 20 62	1	72	1	..	.....	.01	.1	.....	.....	.....	26	21
5440	404354N	734047.1	07 13 66	1	72	1	16	15	.00	30	3.8	21	5.1	18	15
5440	404354N	734047.1	07 13 66	1	72	1	..	.....	.....	.....	.....	.....	.....	.....	.....
5457	404232N	733605.1	08 12 68	1	52	4	..	.....	.02	.00	.06	.....	.....	9	7
5535	404617N	734144.1	08 15 67	4	390	3	..	.....	.05	.00	.....	.....	.....	85	70
5552	403823N	733827.1	12 04 62	1	28	4	..	.....	2.1	.17	.....	.....	.....	56	46
5552	403823N	733827.1	07 01 66	1	28	4	..	.....	.13	1.8	.....	.....	.....	.....	.....
5552	403823N	733827.1	07 01 66	1	28	4	18	.....	.....	.....	.....	.....	.....	74	61
5552	403823N	733827.1	08 08 68	1	28	4	..	.....	.06	1.7	.08	.....	.....	59	48
5595	404424N	733752.1	06 24 63	1	87	4	16	.....	.....	.....	.....	.....	.....	74	61
5595	404424N	733752.1	10 07 68	1	87	4	..	.....	.08	7.9	.12	.....	.....	60	49
5960	403954N	734334.1	03 03 65	1	36	4	..	.....	.07	.59	.....	.....	.....	49	40
6018	404514N	734119.1	12 03 62	1	91	4	..	.....	.2	.00	.....	.....	.....	27	22
6111	404007N	733921.1	07 13 66	1	41	4	13	.....	.02	.92	.....	.....	.....	.....	.....
6111	404007N	733921.1	07 13 66	1	41	4	..	.....	.....	.....	.....	.....	.....	4	3
6119	404609N	733929.1	11 06 69	1	181	4	..	.....	.....	.....	.....	.....	.....	5	4
6134	404406N	734024.1	12 03 62	1	75	4	..	.....	.2	.00	.....	.....	.....	44	36
6205	404425N	733813.1	06 04 63	4	272	1	..	.....	.....	.....	.....	.....	.....	4	3
6205	404425N	733813.1	07 20 66	4	272	1	..	.....	4.3	.06	.....	.....	.....	.....	.....
6205	404425N	733813.1	07 20 66	4	272	1	..	.....	.....	.....	.....	.....	.....	4	3
6373	404333N	734302.1	01 08 63	1	73	4	..	.....	.....	.5	.....	.....	.....	34	28
6455	403944N	734245.1	12 12 62	1	84	4	..	.....	.20	.00	.....	.....	.....	27	22

SULFATE (SO4)	CHLORIDE (CL)	FLUO- RIDE (F)	AL- BUMIN- OID NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NITRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO PHOS- PHATE (PO4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA,MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHOS/CM AT 25°C)	PH	A N A L Y S T
.....	15	.0	.01	.12	.00	9.0	40	....	....	....	.....	82	....	.....	6.1	2
.....	14	.1	.01	.12	.00	8.1	36	....	....	.09	183	66	....	.....	5.6	2
.....	15	....	....	....	....	7.6	34	....	....	.14	....	....	....	250	5.9	2
47	17	.1	....	....	....	7.0	31	.01	.01	.2	175	78	67	261	6.1	1
.....	17	....	....	.00	.00	7.8	34	....	....	.08	195	80	....	.....	5.7	2
48	17	.0	....	....	....	8.1	36	.05	....	.11	167	79	66	260	6.9	1
44	18	.1	....	2.9	....	5.0	22	.02	....	.09	168	74	63	256	6.4	1
.....	21	....	....	.00	.00	11	46	....	....	.00	190	82	....	.....	6.1	2
.....	14	....	....	.00	.00	11	49	....	....	.00	169	78	....	.....	6.0	2
.....	15	....	.00	.00	.00	11	49	....	....	....	.....	108	....	.....	6.1	2
.....	29	....	.08	3	.00	9.5	42	....	....	2.4	305	132	....	.....	6.0	2
97	35	.0	.00	4.6	.00	7.8	35	.19	.00	.2	297	141	104	494	6.5	1
.....	36	....	....	2.0	.00	9.2	41	....	....	.15	319	148	....	.....	6.0	2
.....	9.5	.0	....	....	.01	5.1	22	....	....	.00	150	53	....	.....	6.0	3
35	16	.0	....	....	....	7.0	31	.09	.00	.2	135	72	64	232	5.7	1
.....	.....	....	.02	.00	.00	....	....	....	....	....	.....	....	....	.....	5.3	2
.....	15	....	.02	.00	.00	8.7	38	....	....	.12	177	82	....	.....	5.9	2
23	15	....	....	....	....	10	44	.03	.03	.11	....	86	....	255	5.9	2
50	15	.1	....	....	....	10	46	.02	....	.19	175	92	82	261	7.0	1
7.1	13	.1	....	....	....	3.6	16	....	....	.00	76	30	20	113	6.4	1
.....	7.0	....	....	.00	....	.1	.4	....	....	.00	111	32	....	.....	5.5	2
.....	7.0	....	....	.00	.00	1.9	8.4	....	....	.00	62	14	....	.....	6.2	2
14	6.8	....	.00	.00	.00	.6	2.7	.04	.04	.02	73	18	....	80	5.9	2
21	12	.1	....	....	....	6.7	30	....	....	....	112	56	44	182	6.1	1
27	15	.3	....	.00	....	21	94	.00	....	.11	194	102	86	316	6.5	1
46	17	.0	....	....	.01	15	66	.00	.00	.14	201	102	82	303	6.6	1
.....	17	.1	.00	.00	.02	7.2	32	....	....	....	....	59	....	.....	6.0	2
.....	21	....	.03	1.5	.00	10	44	....	....	.96	217	78	....	.....	5.8	2
46	37	.0	....	1.7	.01	5.4	24	.22	.06	.3	197	79	62	330	6.8	1
.....	52	....	....	.7	.01	6.4	28	....	....	.14	240	70	....	.....	5.8	2
2.0	6.2	....	.00	.00	.00	1.6	7.0	....	....	.00	76	22	....	70	6.1	2
.....	14	.1	.00	.00	.00	5.4	24	....	....	....	....	47	....	.....	5.5	2
.....	20	....	.04	1.8	.00	8.8	39	....	....	.84	231	86	....	.....	5.5	2
.....	18	....	....	.60	.00	7.5	33	....	....	.30	233	76	....	.....	5.4	2
4.8	4.5	.0	.04	.06	.00	.0	.0	....	....	.01	39	10	0	43	6.4	1
.....	7.8	....	....	.00	....	3.2	14	....	....	.00	71	24	....	90	5.9	2
51	.....	....	....	....	....	....	....	....	....	....	167	....	....	280	5.9	1
.....	28	....	.01	.00	.00	4.2	19	....	.04	.00	....	80	....	280	5.8	2
38	32	....	....	....	....	5.3	23	....	.00	.00	244	92	....	.....	5.9	2
.....	19	.0	.00	.00	.01	10	44	....	....	....	....	74	....	.....	5.9	2
.....	18	....	....	.00	.00	5.6	25	....	....	.00	141	54	....	.....	6.0	2
.....	52	....	.01	.00	.00	8.5	38	....	....	.00	....	80	....	.....	6.5	2
17	15	.1	....	.04	.00	2.9	13	....	....	.04	148	77	34	185	7.0	1
.....	9.0	.0	.00	.00	.00	3.1	14	....	....	....	....	58	....	.....	5.7	2
.....	15	....	.00	.00	.00	6.2	27	....	....	.00	189	92	....	.....	6.2	2
.....	20	....	.01	.00	.00	3.3	15	....	....	.00	195	100	....	.....	5.9	2
.....	13	....	.00	.25	.00	.1	.4	....	....	.00	94	40	....	.....	5.6	2
.....	19	....	....	.00	.00	.2	.8	....	....	.35	162	63	....	.....	5.4	2
6.2	6.6	.1	....	.00	.01	2.5	11	....	....	.03	75	38	11	108	7.0	1
.....	11	.0	.00	.00	.00	5.7	25	....	....	....	....	54	....	.....	6.1	2
.....	15	....	.01	.00	.00	8.8	39	....	....	.00	175	70	....	.....	5.8	2
.....	18	....	....	.00	.00	11	49	....	....	.00	226	94	....	290	5.9	2
13	5.3	.0	.08	.02	.0	.0	.0	.34	.11	.01	52	20	10	70	6.9	1
.....	22	.2	....	....	.00	16	71	....	....	.12	230	100	....	.....	5.9	3
45	30	.0	....	....	....	9.8	43	....	....	....	230	90	76	318	6.0	1
.....	.....	....	.01	.00	.00	....	....	....	.08	.00	....	....	....	.....	....	2
43	21	....	....	....	....	5.5	24	....	.04	.00	162	70	....	230	6.5	2
.....	6.2	....	.00	.00	.00	1.3	5.8	....	....	.00	122	....	....	.....	8.7	2
.....	11	.0	.03	.12	.14	.8	3.5	....	....	1.8	95	70	....	.....	6.8	3
57	.....	....	....	....	....	....	....	....	....	....	239	....	....	399	....	1
.....	34	....	.04	2.3	.09	3.6	16	.02	.01	.58	....	140	....	.....	6.2	2
48	38	....	....	....	....	2.5	11	.14	.10	.34	220	112	....	365	6.6	2
.....	.....	....	....	....	....	....	....	....	....	.14	....	....	....	.....	6.6	2
57	34	....	....	....	....	....	....	.02	.0	.14	208	106	....	360	6.7	2
.....	21	....	.42	2.2	.10	3.2	14	....	....	.10	228	120	....	.....	6.3	2
.....	18	....	....	....	.00	8.9	39	....	....	.05	240	104	....	.....	6.0	3
48	.....	....	....	....	....	....	....	....	....	....	263	....	....	355	5.1	1
.....	48	....	.03	.92	.00	12	53	....	.03	.39	....	96	....	.....	5.0	2
19	17	....	....	....	....	11	49	....	.04	.00	.07	78	....	200	6.7	2
.....	34	.0	....	....	.00	26	115	....	....	.05	130	66	....	.....	6.5	3
.....	.....	....	....	....	....	....	....	....	....	.00	....	....	....	.....	5.4	2
56	.....	....	....	....	....	....	....	....	....	....	116	....	....	182	4.2	1
.....	11	....	.01	.00	.00	.0	.2	....	.03	.00	....	46	....	.....	5.5	2
.....	40	.0	....	....	.00	1.7	7.5	....	....	.00	400	100	....	.....	6.1	3
.....	16	.0	....	....	.01	11	49	....	....	.17	265	112	....	.....	5.9	3

TABLE 2. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE SEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1952-72 --CONTINUED

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A DEPTH OF WELL U I F E R (FEET)	U S E T E M- P E R A- T U R E (°C)	SILICA (SiO2)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	ALKA- LINITY AS CaCO3
6455	403944N 734245.1	03 03 65	1	84	4 ..	..20	.00	....	....	....	....	....	17	14
6455	403944N 734245.1	07 06 66	1	84	4 17	..18	.08	....	....	....	....	....	....	....
6455	403944N 734245.1	07 06 66	1	84	4 ..	....	....	....	....	....	....	....	19	15
6455	403944N 734245.1	08 07 68	1	84	4 15	..08	.00	.04	....	....	....	....	17	14
6463	404209N 734044.1	12 18 62	1	27	4 ..	2.9	.01	....	....	....	....	....	27	22
6470	403938N 734339.1	03 03 65	1	38	1 ..	14	.03	....	....	....	....	....	74	61
6470	403938N 734339.1	07 01 66	1	38	1 18	....	....	....	....	....	....	....	79	64
6470	403938N 734339.1	07 01 66	1	38	1 18	4.7	.58	....	....	....	....	....	....	....
6502	404357N 733905.1	10 24 62	1	90	3 ..	..00	.00	....	....	....	....	....	73	60
6502	404357N 733905.1	06 30 66	1	90	3 13	....	....	....	....	....	....	....	16	13
6502	404357N 733905.1	06 30 66	1	90	3 13	15	.03	.01	....	20	4.8	14	3.1	17
6502	404357N 733905.1	09 07 67	1	90	3 ..	....	.09	.08	....	....	....	....	17	14
6502	404357N 733905.1	08 06 68	1	83	3 13	....	.04	.17	....	....	....	....	12	10
6502	404357N 733905.1	06 09 71	1	90	3 ..	....	.00	.00	....	....	....	....	20	16
6744	404238N 734205.1	08 21 62	1	94	5 ..	....	.00	.00	....	....	....	....	15	12
6744	404238N 734205.1	08 22 67	1	94	5 14	14	.01	.05	.00	21	4.8	11	1.8	18
6744	404238N 734205.1	08 08 68	1	94	5 ..	....	.02	.00	....	....	....	....	13	11
6760	404415N 733936.1	12 03 62	1	81	1 ..	....	1.30	.00	....	....	....	....	38	31
6760	404415N 733936.1	07 13 66	1	81	1 ..	14	.06	.02	....	28	3.4	10	3.2	18
6760	404415N 733936.1	07 13 66	1	81	1 ..	....	....	....	....	....	....	....	....	....
6760	404415N 733936.1	08 06 68	1	81	1 14	....	.04	.03	.32	....	....	....	15	12
6843	404227N 733926.1	12 10 62	1	51	1 ..	....	.02	.00	....	....	....	....	22	18
6843	404227N 733926.1	07 07 66	1	51	1 ..	....	....	....	....	....	....	....	37	30
6843	404227N 733926.1	07 07 66	1	51	1 14	....	.04	.11	....	....	....	....	....	....
6843	404227N 733926.1	09 01 67	1	51	1 ..	....	.07	.00	.06	....	....	....	49	40
6843	404227N 733926.1	08 06 68	1	51	1 16	....	.04	.00	.04	....	....	....	76	62
6863	404037N 734312.1	10 31 62	1	74	4 ..	....	.24	.44	....	....	....	....	120	98
6863	404037N 734312.1	06 22 66	1	74	4 18	12	.04	1.7	....	126	16	82	40	108
6863	404037N 734312.1	07 01 66	1	74	4 18	....	....	....	....	....	....	....	118	97
6863	404037N 734312.1	08 06 68	1	74	4 20	....	.06	4.35	.08	....	....	....	155	129
6864	403842N 733958.1	10 30 62	1	70	4 ..	....	.46	.49	....	....	....	....	42	34
6898	403903N 733853.1	12 04 62	1	34	4 ..	....	.05	....	....	....	....	....	24	20
6905	404256N 733855.1	10 24 62	1	78	3 ..	....	.00	.00	....	....	....	....	51	42
6905	404256N 733855.1	06 30 66	1	78	3 ..	....	.02	.01	....	....	....	....	....	....
6905	404256N 733855.1	06 30 66	1	78	3 12	....	....	....	....	....	....	....	11	9
6905	404256N 733855.1	09 07 67	1	78	3 ..	....	.39	.00	....	....	....	....	27	22
6981	404207N 733627.1	12 05 62	1	34	4 ..	....	.03	.00	....	....	....	....	24	20
6981	404207N 733627.1	07 06 66	1	34	4 14	....	.08	.02	....	....	....	....	....	....
6981	404207N 733627.1	07 06 66	1	34	4 ..	....	....	....	....	....	....	....	12	10
6981	404207N 733627.1	07 18 66	1	34	4 ..	....	.04	.00	1.4	....	....	....	....	....
7006	403934N 734209.1	12 12 62	1	30	4 ..	....	.50	1.8	....	....	....	....	93	76
7006	403934N 734209.1	07 21 66	1	30	4 ..	....	.39	2.1	....	....	....	....	....	....
7006	403934N 734209.1	07 27 66	1	30	4 ..	....	....	....	....	....	....	....	77	63
7041	403923N 733539.1	12 10 62	1	29	4 ..	....	.28	.02	....	....	....	....	69	56
7048	404242N 734108.1	12 10 62	1	34	2 ..	....	.05	.00	....	....	....	....	30	25
7053	404625N 734057.1	09 20 67	4	286	3 ..	....	.07	.00	....	....	....	....	56	46
7065	404224N 733921.1	10 19 62	1	64	8 ..	....	.12	.17	....	....	....	....	116	95
7088	404412N 734023.1	12 03 62	1	70	4 ..	....	.04	.00	....	....	....	....	19	16
7161	403855N 733924.1	12 12 66	4	666	7 ..	7.0	9.7	.05	....	.2	4.8	.3	9	7
7161	403855N 733924.1	06 15 67	4	666	7 ..	7.1	1.9	.07	....	1.7	2	4.8	.5	10
7204	403938N 734115.1	07 21 66	1	28	4 ..	....	.81	.30	....	....	....	....	....	....
7204	403938N 734115.1	07 21 66	1	28	4 ..	....	....	....	....	....	....	....	47	39
7207	403855N 733924.2	12 13 63	4	98	7 ..	....	....	....	....	....	....	....	....	....
7207	403855N 733924.2	10 13 69	4	98	7 ..	....	.40	.00	....	....	....	....	21	17
7210	404214N 733745.1	12 18 62	1	24	4 ..	....	.00	.00	....	....	....	....	43	35
7210	404214N 733745.1	07 13 66	1	24	4 19	....	.00	.05	....	....	....	....	....	....
7210	404214N 733745.1	07 13 66	1	24	4 ..	....	....	....	....	....	....	....	17	14
7210	404214N 733745.1	10 13 66	1	24	4 18	....	.00	.05	....	....	....	....	17	14
7217	404419N 733818.1	07 12 67	1	72	1 13	....	.11	.00	.13	....	....	....	10	8
7217	404419N 733818.1	07 16 68	1	72	1 ..	....	.06	.00	.07	....	....	....	9	7
7217	404419N 733818.1	08 20 69	1	72	1 ..	....	.02	.00	.07	....	....	....	9	7
7217	404419N 733818.1	09 23 70	1	72	1 ..	....	.04	.00	....	....	....	....	10	8
7231	403822N 733634.1	10 02 69	1	29	7 ..	....	1.4	.83	....	....	....	....	110	93
7243	403702N 733908.1	12 04 62	1	28	4 ..	24	.00	.00	....	....	....	....	61	50
7376	404457N 734025.1	12 03 69	1	106	4 ..	....	.00	.00	.10	....	....	....	30	25
7493	404237N 734337.1	03 01 64	4	353	7 13	12	1.6	.07	....	11	1.6	5.1	.6	33
7493	404237N 734337.1	09 07 67	4	353	7 13	....	.73	.00	.04	....	....	....	15	12
7529	404152N 733813.2	10 02 67	1	67	3 ..	....	.07	.00	....	....	....	....	12	10
7548	404010N 734253.1	07 17 69	4	511	5 ..	....	.08	.00	....	....	....	....	10	8
7581	404640N 733814.1	09 20 67	1	92	1 ..	....	.02	.00	.01	....	....	....	30	25
7581	404640N 733814.1	06 16 71	1	92	1 13	13	.64	.05	....	20	6.5	10	3.1	20
7649	404345N 734120.1	08 22 67	4	205	5 12	....	.02	.00	....	....	....	....	18	15
7649	404345N 734120.1	08 22 67	4	205	5 12	....	.02	.00	....	....	....	....	18	15
7676	403805N 733953.4	02 11 65	1	10	7 ..	4.0	15	.32	....	51	23	278	16	104
7680	403801N 733955.2	09 27 66	1	44	7 ..	17	.39	4.2	....	25	14	122	7.1	17

SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	AL- BUMIN- OID NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NI TRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO PHOS- PHATE (PO4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHOS/CM AT 25°C)	PH	AN- AL- Y- S- T
.....	20	....	.01	.....	.02	11	49	.....	.....	.05	272	116	.....	.....	5.8	2
86	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	232	.....	.....	387	5.5	1
38	20	....	.01	.00	.00	9.2	41	.01	.01	.14	.....	.....	.....	.....	5.6	2
.....	21	....	.....	.....	.....	12	53	.14	.00	.35	.....	116	.....	380	5.9	2
.....	21	.0	.....	.....	.01	2.7	12	.....	.....	.2	100	56	.....	.....	6.8	3
.....	22	....	.43	6.5	.01	.1	.....	.....	.....	.27	147	32	.....	.....	7.2	2
77	18	....	.03	.72	.00	1.5	6.6	.03	.02	.41	.....	140	.....	.....	.....	2
.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	221	.....	.....	358	5.9	1
.....	13	.1	.....	.....	.00	.3	1.4	.....	.....	.00	165	90	.....	.....	6.6	2
.....	14	.....	.00	.00	.00	5.6	.....	.02	.02	.00	154	72	.....	230	5.7	3
45	14	.0	.....	.....	.....	5.9	26	.14	.00	.1	154	70	56	237	6.0	1
.....	14	.....	.01	.00	.00	3.9	17	.....	.....	.00	140	58	.....	.....	6.3	2
21	11	.....	.....	.....	.....	3.6	16	.09	.02	.02	.....	62	.....	200	6.1	2
.....	16	.....	.....	.00	.00	5.6	25	.03	.01	.00	189	82	.....	.....	6.2	2
.....	16	.....	.00	.00	.00	9.6	42	.....	.....	.00	237	76	.....	.....	5.9	2
37	16	.0	.....	.....	.....	5.9	26	.13	.....	.1	136	72	57	236	6.6	1
.....	20	.....	.....	.00	.00	8.7	39	.....	.....	.00	240	94	.....	.....	5.8	2
.....	12	.0	.....	.....	.03	10	44	.....	.....	.07	120	100	.....	.....	6.1	3
50	12	.....	.....	.....	.....	6.6	29	.....	.....	.....	181	84	69	255	6.2	1
.....	.....	.....	.01	.00	.00	.....	.....	.....	.06	.00	.....	.....	.....	.....	.....	2
22	13	.....	.....	.....	.....	5.6	25	.05	.02	.04	183	94	.....	235	5.9	2
.....	12	.0	.....	.....	.01	4.2	19	.....	.....	.01	100	61	.....	.....	6.0	3
.....	14	.....	.03	.70	.02	5.5	24	.02	.01	.05	.....	.....	.....	.....	.....	2
76	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	204	.....	.....	336	6.1	1
.....	14 0	.....	.04	1.2	.04	6.2	27	.04	.04	.00	309	160	.....	420	6.3	2
56	17	.....	.....	.....	.....	9.0	40	.03	.00	.05	.....	192	.....	490	6.6	2
.....	50	.2	.16	13	.45	7.3	32	.....	.....	.85	455	198	.....	.....	7.8	3
160	235	.4	.....	.....	.....	5.7	25	.11	.05	.30	763	381	292	1280	6.4	1
.....	216	.....	.10	3.5	.01	7.3	32	.04	.04	.22	.....	370	.....	.....	6.4	2
90	320	.....	.....	.....	.....	7.2	32	.05	.03	.19	1136	550	.....	1500	6.7	2
.....	21	.1	.3	14	.01	3.8	17	.....	.....	1.4	185	59	.....	.....	5.9	3
.....	10	.....	.....	.....	.00	4.0	18	.....	.....	.04	160	96	.....	.....	6.1	3
.....	9.2	.1	.....	.....	.00	1.4	6.2	.....	.....	.00	100	66	.....	.....	6.4	3
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83	.....	.....	134	6.1	1
.....	9.0	.....	.00	.00	.00	2.5	11	.01	.00	.00	.....	44	.....	.....	.....	2
.....	9.0	.....	.01	.11	.02	2.8	12	.....	.....	.00	.....	54	.....	.....	6.5	2
.....	9.5	.0	.....	.....	.00	4.2	19	.....	.....	.05	95	84	.....	.....	5.9	3
40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	136	.....	.....	206	5.9	1
.....	16	.....	.02	.15	.00	2.8	12	.00	.00	.09	.....	66	.....	.....	.....	2
.....	27	.....	.....	.....	.....	4.2	19	.05	.02	.04	189	92	.....	295	6.5	2
.....	20	.0	.....	.....	.00	.8	3.5	.....	.....	.5	195	94	.....	.....	6.4	3
43	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	193	.....	.....	313	6.4	1
.....	22	.....	.02	2.0	.01	.4	1.8	.....	.02	.17	.....	102	.....	.....	6.2	2
.....	85	.1	.....	.....	.04	1.4	6.2	.....	.....	.2	530	252	.....	.....	6.6	3
.....	14	.0	.....	.....	.00	9.6	42	.....	.....	.26	225	98	.....	.....	6.0	3
.....	7.0	.....	.01	.1	.00	1.2	5.3	.....	.00	.00	.....	60	.....	178	7.0	2
.....	20	.2	.....	.....	.45	3.3	15	.....	.....	.65	160	66	.....	.....	6.4	3
.....	10	.0	.....	.....	.01	2.8	12	.....	.....	.00	245	46	.....	.....	6.2	3
3.8	2.3	.1	.....	.....	.....	.0	.....	.....	.....	.....	37	2	0	34	6.0	1
4.3	4.0	.0	.....	.....	.....	.0	.1	.01	.....	.00	35	5	0	34	6.0	1
44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	147	.....	.....	234	6.6	1
.....	14	.....	.03	.00	.01	1.5	6.6	.....	.03	.03	.....	92	.....	.....	.....	2
.....	5.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	145	7.0	1
4.0	4.0	.....	.....	.....	.....	.0	.1	.....	.03	.04	48	18	.....	.....	6.9	2
.....	14	.0	.....	.....	.00	2.7	12	.....	.....	.18	115	116	.....	.....	6.8	3
41	.....	.....	.....	.....	.....	.....	.....	.....	.04	.00	204	82	.....	313	6.2	1
.....	22	.....	.01	.00	.00	1.6	7.1	.....	.04	.00	.....	.....	.....	325	.....	2
.....	22	.....	.01	.00	.00	1.6	7.1	.....	.04	.00	204	82	.....	313	6.2	2
.....	16	.....	.04	.13	.00	1.5	6.6	.....	.06	.01	.....	61	.....	210	6.0	2
36	17	.....	.....	.....	.....	.....	.....	.....	.00	.00	168	64	.....	210	5.9	2
20	23	.....	.06	.13	.00	1.3	5.8	.03	.02	.00	167	62	.....	230	6.1	2
49	32	.....	.....	.....	.....	1.5	6.6	.10	.03	.04	174	60	.....	225	5.5	2
.....	33	.....	.08	10	.01	7.0	31	.02	.0	.69	301	120	.....	400	7.2	2
.....	3100	.3	.....	.....	.03	.0	.....	.....	.....	.54	6800	320	.....	.....	6.6	3
23	14	.....	.....	.....	.....	9.0	40	.00	.00	.04	.....	66	.....	200	6.4	2
2.2	5.0	.1	.....	.....	.....	4.1	18	.....	.....	.....	74	34	7	104	6.8	1
.....	7.0	.....	.11	.11	.00	4.0	18	.....	.22	.15	98	28	.....	110	7.0	2
.....	17	.....	.01	.00	.00	4.2	19	.....	.....	.00	189	82	.....	.....	6.0	2
.....	4.4	.....	.....	.....	.....	.0	.1	.....	.....	.00	50	12	.....	45	5.7	2
.....	15	.....	.01	.09	.00	7.8	35	.....	.08	.04	203	80	.....	258	6.8	2
30	17	.0	.....	.03	.00	7.2	32	.00	.00	.12	159	77	56	236	6.2	1
.....	15	.....	.00	.00	.00	9.5	42	.....	.....	.00	185	72	.....	.....	6.1	2
.....	15	.....	.....	.00	.00	9.5	42	.....	.....	.00	185	72	.....	250	6.1	2
182	400	.1	.....	.....	.....	3.2	14	.65	.....	.3	1030	220	135	1660	6.8	1
77	208	.0	.....	.....	.....	3.0	13	.....	.....	.....	495	120	106	919	5.8	1

TABLE 2. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE SEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1952-72 --CONTINUED

WELL NUMBER	LOCATION	DATE COL- LEC- TION	A Q OF WELL U BELOW I LAND F SUR- FACE R (FEET)	DEPTH OF WELL U BELOW I LAND F SUR- FACE R (FEET)	TEMPERATURE (°C)	SILICA (SiO2)	TOTAL IRON (FE)	TOTAL MANGANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAGNESIUM (MG)	SODIUM (NA)	POTASSIUM (K)	BICARBONATE (HCO3)	ALKALINITY AS CaCO3
7731	404612N 734006.1	09 20 67	1	149	7 ..	.....	.11	.00	.40	.....	.....	.....	.....	56	46
7799	404319N 734016.1	07 07 66	1	81	3 ..	.....	.....	.....	.....	.....	.....	.....	.....	15	12
7799	404319N 734016.1	07 07 66	1	81	3 12	.....	.02	.02	.....	.....	.....	.....	.....	.....	.....
7799	404319N 734016.1	09 07 67	1	81	3 ..	.....	.09	.03	.....	.....	.....	.....	.....	16	13
7799	404319N 734016.1	07 17 68	1	81	3 ..	.....	.02	.00	.07	.....	.....	.....	.....	16	13
7799	404319N 734016.1	06 23 71	1	81	3 ..	9.4	.07	.00	.....	19	5.1	17	1.4	18	15
7801	403801N 733955.7	01 25 68	4	317	7 ..	7.1	.01	.05	.....	.4	.2	3.5	.5	4	3
8039	404207N 733653.1	07 07 66	1	55	4 ..	.....	.....	.....	.....	.....	.....	.....	.....	13	11
8039	404207N 733653.1	07 07 66	1	55	4 13	.....	.02	.02	.....	.....	.....	.....	.....	.....	.....
8039	404207N 733653.1	07 17 68	1	55	4 ..	.....	.06	.03	.....	.....	.....	.....	.....	13	11
8129	404224N 733921.2	07 21 66	1	64	4 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8129	404224N 733921.2	07 21 66	1	64	4 15	13	.04	3.8	.....	47	11	20	12	104	85
8129	404224N 733921.2	08 06 68	1	64	4 18	.....	.08	4.4	.05	.....	.....	.....	.....	110	92
8149	404003N 734056.5	07 27 66	1	40	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	96	79
8149	404003N 734056.5	01 24 67	1	40	7 13	8.4	2.8	5.0	.12	18	7.2	26	16	109	89
8149	404003N 734056.5	06 29 67	1	40	7 ..	.....	.....	.....	.18	.....	.....	.....	.....	.....	.....
8149	404003N 734056.5	06 29 67	1	40	7 13	7.7	1.0	4.4	.....	16	5.0	40	26	97	80
8149	404003N 734056.5	11 15 67	1	40	7 13	.....	.75	4.8	.10	.....	.....	.....	.....	85	70
8149	404003N 734056.5	04 08 68	1	40	7 12	.....	.42	3.0	.04	.....	.....	.....	.....	77	63
8149	404003N 734056.5	07 10 68	1	40	7 13	.....	1.6	.....	.59	.....	.....	.....	.....	70	57
8149	404003N 734056.5	10 09 68	1	40	7 14	.....	.00	4.1	.18	.....	.....	.....	.....	71	58
8149	404003N 734056.5	03 06 69	1	40	7 13	.....	.16	3.8	.08	.....	.....	.....	.....	62	51
8149	404003N 734056.5	06 05 69	1	40	7 ..	.....	.40	5.4	.06	.....	.....	.....	.....	50	41
8149	404003N 734056.5	01 29 70	1	40	7 ..	.....	.02	2.2	.....	.....	.....	.....	.....	70	57
8149	404003N 734056.5	10 16 70	1	40	7 14	.....	.37	.67	.11	.....	.....	.....	.....	61	50
8149	404003N 734056.5	05 18 71	1	40	7 13	9.4	1.6	.74	.....	42	8.7	55	17	36	30
8150	404003N 734056.3	07 29 66	1	56	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	13	11
8150	404003N 734056.3	07 29 66	1	56	7 14	.....	3.6	1.4	.....	.....	.....	.....	.....	.....	.....
8150	404003N 734056.3	08 09 66	1	56	7 ..	.....	6.6	2.0	.....	.....	.....	.....	.....	.....	.....
8150	404003N 734056.3	08 09 66	1	56	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8150	404003N 734056.3	01 24 67	1	56	7 ..	.....	5.1	.91	.....	.....	.....	.....	.....	12	10
8150	404003N 734056.3	06 29 67	1	56	7 ..	.....	.....	.22	.....	.....	.....	.....	.....	.....	.....
8150	404003N 734056.3	06 29 67	1	56	7 13	2.0	9.2	.04	.....	11	3.0	25	9.2	13	11
8150	404003N 734056.3	11 15 67	1	56	7 13	.....	5.1	.30	.16	.....	.....	.....	.....	26	21
8150	404003N 734056.3	04 08 68	1	56	7 12	.....	1.7	.41	.04	.....	.....	.....	.....	49	40
8150	404003N 734056.3	07 10 68	1	56	7 13	.....	.50	.91	.11	.....	.....	.....	.....	51	42
8150	404003N 734056.3	10 09 68	1	56	7 13	.....	.94	.63	.12	.....	.....	.....	.....	44	36
8150	404003N 734056.3	03 06 69	1	56	7 13	.....	.02	1.7	.12	.....	.....	.....	.....	61	50
8150	404003N 734056.3	06 05 69	1	56	7 13	.....	1.6	1.7	.07	.....	.....	.....	.....	72	59
8150	404003N 734056.3	07 29 69	1	56	7 14	.....	.....	.....	.....	.....	.....	.....	.....	13	11
8150	404003N 734056.3	01 29 70	1	56	7 ..	.....	.45	2.3	.....	.....	.....	.....	.....	52	43
8150	404003N 734056.3	10 16 70	1	56	7 14	.....	.88	1.4	.11	.....	.....	.....	.....	55	45
8150	404003N 734056.0	05 18 71	1	56	7 14	3.7	2.2	1.3	.....	16	5.3	49	26	62	51
8203	403910N 733417.1	06 20 68	1	16	7 ..	.....	.69	.59	.....	.....	.....	.....	.....	45	37
8235	404203N 733546.3	12 13 66	1	53	7 ..	.....	.75	.91	.....	.....	.....	.....	.....	17	14
8235	404203N 733546.3	01 30 67	1	53	7 12	11	1.5	.29	.....	21	4.1	24	4.8	19	16
8235	404203N 733546.3	06 27 67	1	53	7 14	11	3.7	.04	.....	18	3.9	26	5.7	20	16
8235	404203N 733546.3	12 15 67	1	53	7 13	.....	1.2	.22	.36	.....	.....	.....	.....	26	21
8235	404203N 733546.3	01 19 68	1	53	7 13	.....	2.1	.22	.20	.....	.....	.....	.....	26	21
8273	403950N 734310.1	04 13 67	1	29	7 ..	.....	.....	.....	1.6	.....	.....	.....	.....	.....	.....
8277	404419N 733830.1	06 05 67	4	361	1 ..	.....	.04	.00	.....	.....	.....	.....	.....	7	6
8277	404419N 733830.1	07 16 68	4	361	1 ..	10	.07	.04	.09	11	3.8	10	1.2	12	10
8306	404354N 734047.2	10 03 67	1	95	1 16	.....	.05	.00	.....	.....	.....	.....	.....	16	13
8306	404354N 734047.2	08 07 68	1	95	1 16	.....	.02	.00	.03	.....	.....	.....	.....	13	11
8337	403926N 733515.2	05 01 67	1	38	7 ..	.....	.18	.05	.48	.....	.....	.....	.....	23	18
8337	403926N 733515.2	05 09 67	1	38	7 ..	.....	.07	.05	4.5	.....	.....	.....	.....	31	26
8337	403926N 733515.2	06 28 67	1	38	7 14	8.4	.15	.05	.....	26	4.3	8.4	3.3	22	18
8337	403926N 733515.2	06 28 67	1	38	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8337	403926N 733515.2	12 15 67	1	38	7 13	.....	.09	.00	2.8	.....	.....	.....	.....	10	8
8337	403926N 733515.2	04 08 68	1	38	7 13	.....	.08	.00	1.5	.....	.....	.....	.....	17	14
8337	403926N 733515.2	07 10 68	1	38	7 ..	.....	.88	.00	.....	.....	.....	.....	.....	17	14
8337	403926N 733515.2	10 09 68	1	38	7 14	.....	.00	.00	1.8	.....	.....	.....	.....	17	14
8337	403926N 733515.2	03 06 69	1	38	7 13	.....	.00	.00	2.2	.....	.....	.....	.....	22	18
8337	403926N 733515.2	06 11 69	1	38	7 13	8.7	.00	.00	.....	24	3.4	10	3.2	23	19
8337	403926N 733515.2	01 29 70	1	38	7 ..	.....	.10	.00	.....	.....	.....	.....	.....	17	14
8337	403926N 733515.3	04 08 68	4	76	7 13	.....	.04	.05	1.0	.....	.....	.....	.....	16	13
8338	403926N 733515.3	05 09 67	4	76	7 ..	.....	.02	.00	.09	.....	.....	.....	.....	43	35
8338	403926N 733515.3	06 28 67	4	76	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8338	403926N 733515.3	06 28 67	4	76	7 14	11	.....	.....	.....	15	2.7	10	1.1	10	8
8338	403926N 733515.3	12 15 67	4	76	7 13	.....	.37	.00	.80	.....	.....	.....	.....	20	16
8338	403926N 733515.3	04 08 68	4	76	7 13	.....	.04	.05	1.0	.....	.....	.....	.....	26	21
8338	403926N 733515.3	07 10 68	4	76	7 ..	.....	.14	.37	.....	.....	.....	.....	.....	50	41
8338	403926N 733515.3	10 09 68	4	76	7 14	.....	.00	.17	1.4	.....	.....	.....	.....	34	28
8338	403926N 733515.3	03 06 69	4	76	7 12	.....	.08	.00	1.2	.....	.....	.....	.....	26	21
8338	403926N 733515.3	06 11 69	4	76	7 13	.....	.12	.00	.....	.....	.....	.....	.....	26	21

SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	AL- BUMIN- OID NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NITRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO- PHOS- PHATE (PO4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHOS/CM AT 25°C)	PH	AN- AL- LYS- T
.....	6.0	....	.02	.14	.00	.8	34	....	.04	.02	121	54	....	160	7.2	2
.....	10	....	.02	.00	.00	3.4	15	.02	.00	.04	.....	58	....	180	5.9	2
32	.....	....	....	....	....	....	....	....	....	....	108	....	....	172	6.1	1
.....	15	....	.00	.00	.00	6.2	27	....	.00	.00	191	78	....	.....	5.9	2
21	11	....	....	....	....	4.0	18	....	.00	.02	143	60	....	.....	6.3	2
34	29	.1	.13	.01	.01	4.1	18	.00	.00	.06	142	68	54	244	6.4	1
4.2	3.9	....	....	....	....	.0	....	.0	....	....	22	2	....	28	5.5	1
.....	12	....	.01	.00	.00	4.7	21	.01	.00	.14	.....	92	....	260	....	2
64	.....	....	....	....	....	....	....	....	....	....	156	....	....	256	5.9	1
38	18	....	....	....	....	7.0	31	....	.02	.00	226	96	....	.....	6.2	2
.....	.....	....	.06	.88	.01	....	....	....	.01	.00	.....	....	....	.....	....	2
97	23	.0	....	....	....	1.8	7.8	....	....	....	289	162	77	452	6.5	1
38	33	....	....	....	....	4.0	18	.02	.00	.09	364	169	....	500	6.8	2
.....	28	....	....	....	....	6.0	27	....	3.3	.69	.....	70	....	500	6.6	2
49	40	.1	....	....	....	....	.2	.01	.00	.1	207	74	0	439	6.8	1
.....	.....	....	.09	8.0	.00	4.0	....	....	....	....	232	....	....	.....	....	2
37	34	.0	....	....	....	3.8	17	.02	....	.5	237	60	0	404	6.7	1
.....	23	....	.09	3.8	.00	4.4	20	.00	.00	.19	202	75	....	386	6.6	2
.....	37	....	.10	3.5	.00	2.6	12	.04	.00	.05	221	56	....	405	6.8	2
33	25	....	....	....	....	4.8	21	....	....	.05	252	56	....	400	6.7	2
38	35	....	....	....	....	4.6	20	.00	.00	.04	228	58	....	410	6.6	2
43	21	.0	.13	2.0	.00	8.2	36	.03	.03	.04	223	80	....	355	6.5	2
40	54	.1	.06	3.0	.00	11	49	.07	.00	.04	300	94	....	460	6.7	2
55	72	....	....	....	....	7.8	34	.03	.03	.07	354	108	....	500	6.9	2
58	88	....	....	.19	.02	15	66	.03	.03	.12	418	110	....	650	6.3	2
53	120	.0	....	1.9	.08	12	55	....	....	.10	381	141	112	652	6.7	1
.....	.....	....	.23	4.5	.0	10	44	....	2.6	.00	.....	90	....	.....	....	2
.....	24	....	....	....	....	....	....	....	....	....	242	....	....	389	5.2	1
.....	.....	....	....	....	....	....	....	....	....	....	.....	....	....	.....	....	1
.....	19	....	....	....	....	13	58	....	....	.11	.....	....	....	.....	5.5	2
.....	28	....	.15	9.4	.00	6.2	27	.04	.03	.40	219	66	....	410	5.4	2
.....	.....	....	.12	5.5	.00	....	....	....	.06	....	234	....	....	.....	....	2
45	30	.1	....	....	....	1.9	8.3	.02	....	.8	152	40	30	359	5.7	1
.....	27	....	.12	9.5	.00	5.5	24	.03	.02	.71	209	54	....	375	6.0	2
.....	27	....	.13	8.5	.01	5.1	23	.02	.00	.21	187	60	....	350	6.5	2
30	33	....	....	....	....	5.2	23	....	....	.15	213	78	....	420	6.2	2
48	36	....	....	....	....	4.5	20	.00	.00	.15	214	68	....	390	6.2	2
78	29	.1	.15	5	.00	8.8	39	.04	.04	.14	262	98	....	460	6.3	2
73	29	.1	.06	4.2	.00	7.9	35	.00	.00	.09	253	78	....	440	6.5	2
.....	22	....	.23	4.5	.00	10	44	....	2.6	.02	.....	90	....	380	5.0	2
49	.....	....	....	....	....	6.4	28	.07	.00	.13	306	100	....	450	6.6	2
58	36	....	....	3.6	.00	12	53	.03	.00	.21	290	84	....	460	6.2	2
54	55	.0	....	3.8	.01	9.0	40	....	....	.1	271	62	10	484	6.9	1
.....	265	....	....	....	....	.4	1.7	....	.04	.03	659	135	....	1100	7.0	2
.....	22	....	.03	1.8	.02	12	53	.20	.01	.67	214	68	....	300	6.2	2
28	22	.1	....	....	....	15	68	.03	.01	.8	197	70	54	299	6.6	1
31	23	.1	....	....	....	12	55	.03	....	.8	192	61	44	303	6.1	1
.....	22	....	....	10.0	....	11	49	.00	.00	.77	209	62	....	325	6.5	2
.....	23	....	....	10	....	11	49	.02	.02	.69	220	64	....	330	6.6	2
.....	16	....	....	....	....	6.6	29	.20	.07	.34	217	94	....	.....	6.6	2
.....	13	....	.00	.07	.00	5.6	25	....	....	.04	117	48	....	.....	5.8	3
19	15	.0	....	....	....	5.0	22	.01	.00	.09	100	43	33	146	6.6	1
.....	30	....	....	....	....	10	44	.02	.00	.00	.....	91	....	335	6.8	2
41	27	....	....	....	....	10	44	.15	.00	.00	226	88	....	295	6.1	2
.....	13	....	....	....	....	4.4	19	.11	.03	.04	189	88	....	.....	6.3	2
.....	13	....	....	....	....	4.8	21	.04	.02	.05	199	88	....	.....	6.8	2
54	13	.1	....	....	....	3.8	17	.02	....	.1	154	82	64	241	6.1	1
.....	.....	....	.02	.14	.01	....	....	....	.02	....	.....	....	....	.....	....	2
.....	12	....	....	....	....	4.6	20	.00	.00	.00	163	78	....	250	6.4	2
.....	14	....	.02	.30	.00	5.5	24	.04	.00	.02	151	74	....	240	6.2	2
29	11	....	....	....	....	5.3	23	....	.03	.00	221	78	....	.....	6.0	2
50	11	....	....	....	....	4.2	19	.02	.00	.05	189	76	....	230	6.0	2
47	12	.1	.01	.10	.00	4.5	20	.00	.00	.00	148	72	....	226	6.2	2
42	12	.6	....	....	....	5.9	26	.02	.00	.04	136	74	55	232	6.2	1
49	17	....	....	....	....	5.7	25	.10	.02	.04	210	80	....	235	6.3	2
49	17	....	....	.19	.00	6.3	28	.05	.03	.04	202	84	....	260	6.0	2
.....	14	....	....	....	....	.0	.1	.07	.07	.02	105	40	....	130	6.9	2
.....	.....	....	.04	1.1	.08	.2	.9	....	....	....	.....	....	....	.....	....	2
41	17	.1	....	....	....	....	....	....	.05	.00	107	48	40	168	6.1	1
.....	15	....	....	....	....	.1	.4	.11	.03	.00	.....	42	....	168	6.7	2
.....	15	....	.01	.30	.03	.1	.4	.09	.03	.00	106	47	....	175	6.8	2
17	12	....	....	....	....	....	....	....	.00	.00	.....	68	....	220	6.7	2
19	14	....	....	....	....	.3	1.3	.07	.05	.02	120	52	....	171	6.9	2
26	18	.1	....	.90	.01	.0	....	.04	.00	.04	126	44	....	160	6.7	2
29	16	.2	....	....	....	.3	1.3	.15	.05	.09	135	50	....	172	7.1	2

TABLE 2. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE SEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1952-72 --CONTINUED

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A Q U I F E R (FEET)	DEPTH OF WELL BELOW LAND SUR- FACE (FEET)	TEMP- S PERA- TURE (°C)	SILICA (SiO2)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	ALKA- LITY AS CaCO3
8338	403926N 733515.3	01 29 70	4	76	7 ..	.....	.56	.00	.....	.....	.....	.....	.....	34	28
8338	403926N 733515.3	10 15 70	4	76	7 15	.....	.16	.00	.....	.....	.....	.....	.....	28	23
8338	403926N 733515.3	05 21 71	4	76	7 13	.....	.30	.00	.40	.....	.....	.....	.....	21	17
8395	404203N 733547.5	12 21 67	1	23	7 14	.....	.09	.05	.21	.....	.....	.....	.....	20	16
8395	404203N 733547.5	01 19 68	1	23	7 13	.....	.47	.05	.16	.....	.....	.....	.....	18	15
8395	404203N 733547.5	04 08 68	1	23	7 12	.....	.21	.00	.07	.....	.....	.....	.....	13	11
8395	404203N 733547.5	06 07 68	1	23	7 14	.....	....	.06	.....	.....	.....	.....	.....	....	....
8395	404203N 733547.5	07 11 68	1	23	7 15	.....	.10	.00	.25	.....	.....	.....	.....	16	13
8395	404203N 733547.5	10 09 68	1	23	7 17	.....	.64	.00	.11	.....	.....	.....	.....	20	16
8395	404203N 733547.5	03 06 69	1	23	7 12	.....	.34	.00	.09	.....	.....	.....	.....	23	19
8395	404203N 733547.5	06 11 69	1	23	7 13	8.6	.00	.00	.....	36	6.9	25	4.1	20	16
8395	404203N 733547.5	01 29 70	1	23	7 ..	.....	.02	.00	.....	.....	.....	.....	.....	33	27
8395	404203N 733547.5	10 15 70	1	23	7 18	.....	.28	.00	.08	.....	.....	.....	.....	44	36
8395	404203N 733547.5	11 06 70	1	23	7 ..	.....	.00	.00	.....	.....	.....	.....	.....	52	43
8395	404203N 733547.5	12 10 70	1	23	7 ..	.....	.50	.00	.....	.....	.....	.....	.....	35	29
8395	404203N 733547.5	05 19 71	1	23	7 13	6.9	.75	.00	.....	37	6.9	52	4.2	30	25
8396	404203N 733547.6	12 21 67	1	41	7 14	.....	.13	1.0	.25	.....	.....	.....	.....	10	8
8396	404203N 733547.6	01 19 68	1	41	7 13	.....	.55	1.03	.28	.....	.....	.....	.....	16	13
8396	404203N 733547.6	04 08 68	1	41	7 13	.....	.56	1.1	.25	.....	.....	.....	.....	16	13
8396	404203N 733547.6	06 07 68	1	41	7 14	.....	....	.36	.....	.....	.....	.....	.....	....	....
8396	404203N 733547.6	07 11 68	1	41	7 14	.....	.08	1.1	.80	.....	.....	.....	.....	18	15
8396	404203N 733547.6	10 09 68	1	41	7 14	.....	.64	.99	.52	.....	.....	.....	.....	15	12
8396	404203N 733547.6	03 06 69	1	41	7 13	.....	.00	1.0	.56	.....	.....	.....	.....	32	26
8396	404203N 733547.6	06 11 69	1	41	7 14	10	.00	.90	.....	21	3.6	24	5.5	15	12
8396	404203N 733547.6	01 29 70	1	41	7 ..	.....	.37	1.1	.....	.....	.....	.....	.....	20	16
8396	404203N 733547.6	10 14 70	1	41	7 ..	.....	.30	.99	.42	.....	.....	.....	.....	17	14
8396	404203N 733547.6	11 30 70	1	41	7 ..	.....	.56	1.2	.....	.....	.....	.....	.....	15	12
8396	404203N 733547.6	12 10 70	1	41	7 ..	.....	.64	1.2	.....	.....	.....	.....	.....	21	17
8396	404203N 733547.6	05 19 71	1	41	7 ..	11	2.5	1.2	.....	24	4.2	18	5.4	16	13
8496	404138N 734224.1	10 17 68	1	65	2 13	12	.15	.07	1.0	9.5	2.2	16	1.3	20	16
8546	404143N 734221.1	04 29 69	1	98	7 ..	15	.01	.02	3.3	38	6.4	28	2.5	26	21
8546	404143N 734221.1	01 13 72	1	98	7 14	13	.15	.00	2.6	16	2.7	16	2.2	21	17
8547	404143N 734221.2	04 29 69	1	51	7 ..	11	.00	.01	1.7	13	3.0	7.5	1.6	16	13
8547	404143N 734221.2	01 18 72	1	51	7 14	13	.11	.02	.....	20	3.0	9.6	1.3	19	16
8548	404201N 734205.1	04 14 69	1	93	7 ..	15	....	.....	5.3	27	6.6	15	1.4	37	30
8548	404201N 734205.1	01 19 72	1	93	7 14	18	.56	.00	.....	32	8.8	18	1.4	53	43
8549	404201N 734205.2	04 28 69	1	45	7 ..	6.0	.00	.15	2.0	72	18	59	4.8	23	19
8549	404201N 734205.2	01 19 72	1	45	7 ..	7.4	.09	.00	.....	7.3	1.8	18	1.7	41	34
8584	404443N 734044.1	06 16 69	1	73	7 ..	11	.33	.17	1.7	15	17	138	24	1140	935
8584	404443N 734044.1	12 02 69	1	73	7 ..	.....	8.1	.00	.37	.....	.....	.....	.....	537	440
8585	404443N 734044.2	07 02 69	1	100	7 ..	9.8	....	.88	.76	6.9	1.6	11	1.3	28	23
8585	404443N 734044.2	12 03 69	1	100	7 ..	.....	.00	.48	.44	.....	.....	.....	.....	23	19
8598	404239N 733555.2	09 10 69	1	45	7 ..	.....	....	.....	.....	.....	.....	.....	.....	....	....
8598	404239N 733555.2	11 06 70	1	45	7 ..	.....	.00	.00	.....	.....	.....	.....	.....	9	7
8623	404430N 733939.1	12 02 69	1	96	4 ..	.....	.02	.00	.34	.....	.....	.....	.....	30	25
8673	404309N 733537.1	05 28 70	1	33	7 ..	.....	.66	2.5	.....	.....	.....	.....	.....	130	110
8729	404137N 733626.1	10 28 70	1	34	7 ..	.....	.45	.00	.....	.....	.....	.....	.....	22	18
8729	404137N 733626.1	10 06 71	1	34	7 15	5.0	.46	.02	.....	17	2.7	13	2.5	30	25
8730	404113N 733615.2	10 06 70	1	23	7 16	.....	3.6	1.9	.....	.....	.....	.....	.....	55	45
8730	404113N 733615.2	10 06 71	1	23	7 14	4.6	10	1.10	.....	17	1.6	3.4	3.9	36	30
8731	404113N 733615.1	10 06 70	1	29	7 14	.....	6.7	2.8	.....	.....	.....	.....	.....	55	45
8731	404113N 733615.1	10 06 71	1	29	7 14	3.6	14	3.6	.....	14	2.8	4.6	1.3	35	29
8829	404201N 734207.1	02 16 72	1	51	7 ..	9.8	.38	.03	.....	17	3.1	6.7	4.0	28	23

SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	AL- BUMIN- OID NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NITRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO PHOS- PHATE (PO4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA,MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHQS/CM AT 25°C)	PH	AN- AL- LY ST
29	18	....	...	.....	....	.0	.....	.20	.00	.00	.....	50	....	150	6.7	2
20	17	....	...	.85	.00	.2	.6	.19	....	.17	184	52	....	240	6.2	2
30	17	....	...	1.5	.00	.5	2.2	.06	.01	.19	186	58	....	155	6.8	2
.....	29	....	...	.....	....	10	44	.00	.00	.07	276	140	....	395	6.1	2
.....	30	....	...	.....	....	9.4	42	.04	.03	.03	284	128	....	400	6.2	2
.....	33	....	.03	.25	.00	11	49	.02	.02	.07	236	114	....	360	6.0	2
.....	.....	....	...	.....	....	.....	.....	.03	.00	.03	.....	.....	....	360	7.0	2
32	32	....	...	.....	....	17	75	....	....	.04	286	122	....	370	5.9	2
66	33	....	...	.....	....	12	55	.02	.02	.02	296	170	....	405	5.9	2
62	32	.1	.07	.12	.00	13	58	.03	.03	.07	261	122	....	385	5.8	2
56	46	....	...	.....	....	11	49	.02	.00	.08	252	118	102	306	6.0	1
80	3.4	....	...	.....	....	7.8	34	.04	.00	.06	.....	130	....	350	6.2	2
36	31	....	...	.24	.00	2.8	12	....	....	.05	204	86	....	280	6.3	2
37	37	....	...	.14	.00	3.0	13	.07	.06	.05	200	96	....	310	5.9	2
39	47	....	.10	.17	.00	5.3	23	.03	.00	.13	263	100	....	370	6.3	2
52	100	.1	...	.03	.00	7.6	34	....	....	.1	347	121	98	553	6.2	1
.....	25	....	...	.....	....	12	53	.03	.01	.54	.....	66	....	329	6.0	2
.....	24	....	...	.....	....	11	49	.03	.00	.53	223	70	....	330	6.2	2
.....	25	....	.03	1.5	.00	12	53	.02	.00	.44	221	74	....	340	6.0	2
.....	.....	....	...	.....	....	.....	.....	.03	.00	.45	.....	.....	....	350	6.6	2
21	26	....	...	.....	....	14	62	....	....	.45	.....	74	....	325	5.9	2
44	25	....	...	.....	....	14	62	.02	.02	.39	260	68	....	335	5.8	2
44	25	.1	.04	1.3	.00	14	62	.00	.00	.41	223	70	....	327	5.9	2
43	24	....	...	.....	....	12	53	.03	.01	.39	204	68	56	313	5.9	1
41	27	....	...	.....	....	8.8	39	.14	.00	.19	.....	84	....	300	6.2	2
39	26	....	...	.85	.00	11	49	.03	.00	.17	233	72	....	290	5.9	2
40	23	....	.10	.75	.00	9.4	42	.07	.05	.12	249	78	....	325	5.9	2
38	25	....	.10	.70	.00	11	49	.04	.00	.20	223	88	....	310	6.0	2
41	25	.0	....	.64	.01	8.6	38	....	....	.22	212	77	64	297	5.9	1
30	9.0	.1	....	.....	....	2.7	12	.04	....	.05	106	32	....	156	6.2	1
49	26	.0	....	.....	....	22	100	.02	.00	.18	298	122	100	417	6.5	1
27	23	.0	.00	.01	.00	4.3	19	.02	....	.06	129	51	34	209	6.3	1
28	7.9	.0	....	.....	....	3.1	14	.02	.00	.04	101	45	32	149	6.4	1
42	13	.0	.06	.00	.00	3.2	14	.06	....	.05	126	62	47	190	6.1	1
35	17	.0	....	.....	....	13	58	.04	.00	.11	213	94	14	299	6.8	1
47	19	.1	.37	.02	.03	14	62	.07	....	.13	233	116	73	358	6.5	1
20	228	.0	....	.....	....	2.5	11	.04	.00	.07	537	254	235	881	6.4	1
14	10	.0	.23	.00	.00	1.8	8.0	.02	....	.03	89	26	0	143	6.4	1
40	76	.5	....	.....	.05	.1	.4	.09	.01	.21	1070	108	....	1870	7.5	1
30	60	....	....	.....	....	.6	2.6	.27	.19	.04	528	80	....	1300	7.5	2
1.5	8.5	.2	....	.14	.40	.6	2.7	.06	.05	.03	79	24	....	112	6.4	1
10	20	....	....	.....	....	.1	.4	.02	.02	.00	84	26	....	120	6.5	2
49	27	....	....	.....	....	9.7	43	....	.14	.12	255	100	....	.....	6.6	2
59	36	....	....	.10	.00	8.6	38	.06	.06	.05	256	98	....	350	5.4	2
30	21	....	....	.....	....	7.2	32	.02	.02	.05	.....	76	....	240	6.7	2
19	42	....	....	16	.18	.2	.9	5.8	5.4	.90	213	30	....	.....	6.6	2
35	17	....	.07	.20	.00	3.1	14	.08	.00	.03	.....	90	....	200	6.2	2
30	12	.0	....	.00	.00	3.1	13	.18	....	.04	112	54	29	186	6.2	1
31	6.0	....	.04	.09	.00	.4	1.7	.04	.04	.00	.....	60	....	210	7.3	2
26	3.5	.3	.27	.13	.0	.0	.0	.06	....	.02	76	49	20	132	6.6	1
29	7.0	....	.04	.65	.00	.2	.9	.06	.05	.00	.....	50	....	210	7.2	2
28	4.0	.4	....	.75	.00	.0	.0	.18	....	.03	76	46	18	139	6.5	1
22	14	.0	.24	.11	.01	6.5	29	.02	....	.09	120	55	32	188	6.5	1

TABLE 3. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE UNSEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1948-71

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A Q U I F E R (FEET)	DEPTH OF WELL BELOW LAND FACE (FEET)	U T E M- P E R E T U R E (°C)	SILICA (SiO2)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	ALKA- LITY AS CaCO3
101	404524N 733535.1	04 12 67	4	346	5 ..	.....	.00	.00	.....	.....	.....	.....	.....	9	7
107	404732N 733524.1	02 03 65	4	495	5 11	7.1	.04	.01	.....	1.6	.5	3.0	.4	7	6
107	404732N 733524.1	11 14 67	4	495	5 11	.....	.09	.00	.....	.....	.....	.....	.....	.....	4
148	404444N 733210.1	04 28 54	4	152	5 ..	.....	.15	.00	.....	.....	.....	.....	.....	9	7
152	404628N 733420.1	07 22 66	4	476	5 12	11	.03	.03	.....	2.4	.8	4.7	.2	13	11
189	404451N 732650.1	04 15 70	4	185	3 ..	.....	.06	.00	.....	.....	.....	.....	.....	7	4
198	404917N 732929.1	07 18 66	4	616	5 12	6.8	.01	.02	.....	1.1	.4	5.4	.2	7	6
580	404002N 733332.1	04 10 52	1	40	5 ..	.....	.03	.08	.....	.....	.....	.....	.....	15	12
580	404002N 733332.1	07 03 63	1	40	5 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
638	404811N 733602.1	09 25 67	4	560	3 ..	.....	.07	.00	.....	.....	.....	.....	.....	5	4
706	404411N 732615.1	08 31 66	1	70	5 ..	.....	.00	.24	.....	.....	.....	.....	.....	4	3
729	404055N 732559.1	03 05 65	1	73	5 ..	.....	.02	1.3	.....	.....	.....	.....	.....	72	59
1135	404707N 733850.1	11 25 69	1	109	7 ..	.....	.40	.08	1.1	.....	.....	.....	.....	30	25
1176	404736N 733531.1	06 16 71	4	198	7 12	8.3	.42	.05	.....	2.5	1.1	4.6	1.0	8	7
1177	404647N 733514.1	11 19 69	4	146	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	10	8
1177	404647N 733514.1	06 28 71	4	146	7 12	9.5	.70	.00	.....	2.5	.9	4.1	1.6	10	8
1184	404037N 733553.2	10 02 69	1	30	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	24	20
1185	403957N 733342.2	10 02 69	1	18	7 ..	.....	.37	.59	.....	.....	.....	.....	.....	49	40
1185	403957N 733342.1	04 19 71	1	18	7 11	.....	.08	.45	.....	.....	.....	.....	.....	72	59
1194	404657N 733322.1	11 17 69	1	100	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	24	20
1194	404657N 733322.1	07 21 71	1	100	7 ..	10	.34	.00	.....	22	7.6	30	2.2	26	21
1200	404240N 733158.1	09 11 69	1	38	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	15	12
1201	404203N 733151.1	11 19 66	1	29	7 14	.....	.44	1.3	.....	.....	.....	.....	.....	22	18
1201	404203N 733151.1	09 11 69	1	29	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	110	91
1202	404130N 733140.2	09 08 66	1	28	7 16	7.9	.84	1.8	.....	31	4.7	50	12	99	81
1202	404130N 733140.2	09 08 66	1	28	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1202	404130N 733140.2	10 02 69	1	28	7 ..	.....	.04	.00	.....	.....	.....	.....	.....	210	176
1202	404130N 733140.2	03 25 71	1	28	7 13	.....	.02	.63	.76	.....	.....	.....	.....	44	36
1203	404057N 733135.1	11 17 66	1	19	7 16	.....	.75	2.3	.....	.....	.....	.....	.....	13	11
1203	404057N 733135.1	06 04 69	1	19	7 12	8.2	.12	1.9	.....	32	5.3	16	6.1	16	13
1204	404014N 733128.1	11 17 66	1	29	7 14	.....	1.6	2.4	.....	.....	.....	.....	.....	38	31
1204	404014N 733128.1	06 19 68	1	29	7 14	.....	.....	.....	.....	.....	.....	.....	.....	37	30
1219	404218N 732934.2	02 27 68	1	30	7 13	.....	.24	1.4	1.2	.....	.....	.....	.....	30	25
1220	404127N 732909.2	10 02 69	1	24	7 ..	.....	4.2	.34	.....	.....	.....	.....	.....	34	28
1221	404056N 732908.1	05 04 70	1	29	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1223	403946N 732849.1	05 04 70	1	23	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1233	404449N 732824.2	09 11 69	1	40	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	10	8
1235	404339N 732809.1	08 27 69	1	30	7 13	.....	.....	.....	.....	.....	.....	.....	.....	6	5
1236	404301N 732752.1	08 27 69	1	40	7 15	.....	.....	.....	.....	.....	.....	.....	.....	17	14
1238	404152N 732730.1	09 22 65	1	29	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1238	404152N 732730.1	10 29 68	1	29	7 14	.....	5.6	2.7	3.2	.....	.....	.....	.....	100	82
1239	404112N 732714.1	09 22 65	1	25	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1239	404112N 732714.1	10 29 68	1	25	7 14	.....	.72	1.0	.76	.....	.....	.....	.....	54	44
1240	404036N 732704.1	05 04 70	1	29	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1246	404704N 732642.1	07 21 71	4	125	7 10	6.3	.05	.19	.....	12	4.4	9.9	1.6	7	6
1249	404347N 732607.1	12 08 66	1	34	7 ..	.....	.05	.95	.....	.....	.....	.....	.....	21	17
1249	404347N 732607.1	09 12 69	1	34	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	46	38
1250	404310N 732610.1	12 08 66	1	34	7 ..	.....	.27	.63	.....	.....	.....	.....	.....	27	22
1250	404310N 732610.1	09 12 69	1	33	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	5	4
1251	404239N 732552.1	12 08 66	1	19	7 ..	.....	.79	2.0	.....	.....	.....	.....	.....	80	66
1251	404239N 732552.1	03 25 71	1	19	7 10	.....	.....	.....	1.9	.....	.....	.....	.....	121	99
1252	404133N 732539.1	12 08 66	1	24	7 ..	.....	1.2	.48	.....	.....	.....	.....	.....	22	18
1253	404059N 732541.1	12 08 66	1	29	7 ..	.....	.00	.....	.....	.....	.....	.....	.....	73	60
1253	404059N 732541.1	05 04 70	1	29	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1253	404059N 732541.1	10 12 71	1	29	7 13	.....	.16	3.5	.27	.....	.....	.....	.....	163	134
1254	404015N 732527.1	12 08 66	1	28	7 ..	.....	.02	1.9	.....	.....	.....	.....	.....	73	60
1254	404015N 732527.1	05 04 70	1	28	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1263	404302N 732957.5	02 27 68	1	34	7 12	.....	.05	.75	3.7	.....	.....	.....	.....	6	5
1263	404302N 732957.5	05 05 70	1	34	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1269	403926N 733329.1	06 20 68	1	14	7 ..	.....	.06	2.6	.....	.....	.....	.....	.....	92	75
1270	403926N 733329.2	06 20 68	1	35	7 ..	.....	.04	.83	.....	.....	.....	.....	.....	22	18
1271	403859N 733316.1	06 20 68	1	14	7 ..	.....	.08	2.8	.....	.....	.....	.....	.....	79	64
1273	404001N 733035.1	06 20 68	1	14	7 ..	.....	.47	1.4	.....	.....	.....	.....	.....	38	31
1273	404001N 733035.1	04 30 69	1	14	7 ..	.....	1.2	.05	1.2	.....	.....	.....	.....	27	22
1274	404001N 733035.2	07 03 66	1	40	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	35	29
1274	404001N 733035.2	04 30 69	1	40	7 ..	.....	.81	.14	.....	.....	.....	.....	.....	35	29
1275	403935N 733034.1	06 20 68	1	13	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	44	36
1276	403935N 733034.2	06 20 68	1	35	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	57	47
1278	403948N 732728.1	06 21 68	1	14	7 ..	.....	.08	.71	.....	.....	.....	.....	.....	21	17
1278	403948N 732728.1	05 02 69	1	14	7 ..	.....	.06	.63	.90	.....	.....	.....	.....	17	14
1279	403948N 732728.2	06 21 68	1	45	7 ..	.....	.08	.08	.....	.....	.....	.....	.....	9	7
1279	403948N 732728.2	05 02 69	1	45	7 ..	.....	.94	.00	1.5	.....	.....	.....	.....	11	9
1280	404025N 732728.1	06 20 68	1	30	7 ..	.....	.04	1.7	.....	.....	.....	.....	.....	87	71
1445	404126N 733250.2	10 02 69	1	25	7 ..	.....	.97	.37	.....	.....	.....	.....	.....	15	12
1446	404027N 733243.1	05 05 70	1	19	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[CHEMICAL CONSTITUENTS, DISSOLVED-SOLIDS CONTENT, ALKALINITY, AND HARDNESS GIVEN IN MILLIGRAMS PER LITER. LOCATION OF WELLS SHOWN ON PLATE 1. UNSEWERED PART OF REPORT AREA CONSISTS OF NASSAU COUNTY SEWER DISTRICT 3, WHICH WAS UNDER CONSTRUCTION IN 1972. SEE TABLE 2 FOR EXPLANATION OF COLUMN HEADINGS.]

SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	AL- BUMIN- OID NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NITRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO PHOS- PHATE (PO4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHOS/CM AT 25°C)	PH	AN- ALY- SIS
..... .2	10 3.0	.....1	.01...	.00....	.00	4.7 .0	21....	.....14	........	.00 .00	73 21	24 6	.... 0	..... 24	6.0 6.2	2 1
..... .4	..... 12 5.0	..........1	...........	.00........	.00........	.0 6.4....	.2 28 1.5	............	............	.00	20 33	4 66 9	.... ..... 0	..... ..... 37	6.1 5.9 6.8	2 2 1
..... .4	9.5 3.8	..........0	.00........	.00........	.00	2.7 .7	12 3.0	............	............	.00	75 28	50 4	.... 0	130 29	5.2 6.2	1 1
.....	15 19	..............	.00........	.38 3.2....	.00 .01	4.4 11	19 49 3.5	............	............	.....88 .00	..... ..... 28	46 6	.... .... ....	..... ..... .....	5.8 5.7 5.9	2 2 2
..... 23	12 20	..............	.01........	.00 10....	.00	7.1 4.2 7.7	31 19 34	.........08	.... 3.4 .00	.02 196 .09	120 371	32 60 126	.... ..... .....	165 540	5.0 6.0 6.3	2 2 2
..... 1.0 2.0	8.0 8.0	..............	.09........	.01........	.00	2.0 1.7	9.2 7.5	.03 .02	.07 .00	.40 .05	11 72	4 16	..... .....	52 50	6.3 6.4	1 2
..... 78	4.3 31	..............	.02........	.06........	.00	1.7 9.3	7.5 41	.00 .04	.....00	.02 .14	36 294	10 100	2	49 330	6.3 5.9	1 2
..... 69 18	28 36 48	.... ..... .....	.... .... ....	.... 16....	.....01 ....	.... 20 1.6	.... 88 7.1	.03 .07 .04	.00 .04 .00	.90 .88 .03	..... 358 204	134 72 86	.... .... ....	525 600 240	6.1 6.0 6.0	2 2 2
..... 16	79 15	.0.....	.10....	.02....	.00	1.4 .3	6.2 1.3	.18....	.....10	.06 .06	251 92	86 18	65	360 120	6.4 6.4	1 2
..... 53 36	26 51 62	..............	.07	1.8 8.8	.00	15 4.8 4.0	66 21 18	.04.....09	.43 .15 .03	.249 .50 .41	249 294 300	78 78 97	..... ..... 16	370 460 556	5.7 6.0 6.0	2 2 1
..... 47 51	..... 67 27	..............	.14	8.7........	.00 .... ....	..... 1.4 8.3	..... 6.2 37	.....04 .05	.....00 .03	.....50 .24	..... 328 224	..... 94 62	.... ..... .....	..... 575 370	.... 6.4 6.1	2 2 2
..... 106	26 15	..........0	.09	4.5........	.00	5.0 6.1	22 27	.03 .03	.02....	.71 .24	205 221	60 102	..... 89	350 368	5.4 6.7	2 1
..... 56	27 22	..............	.07	4.0 2.2	.00	8.8 19 15	39 84 65	.04 .08 .00	.03 .00 .08	1.8 1.4	262 296 273	82 94 104	.... ..... .....	420 440 400	6.0 6.3 5.8	2 2 2
..... 145	36 36	.... ..... .....	.... .... ....	.... .... ....	.... .... ....	6.8 14	30 62	.03....	.00 .04	.77 .41	318	54 122	.... .....	430 435	5.8 6.5	2 2
..... 17 30	23 41	.... ..... 6.0	............	............	............	.6 2.1 2.0	2.7 9.3 8.9	.........03	.04 .16 .00	.86 .10 .05	..... 158 101	44 26 40	.... ..... .....	212 190 150	7.0 5.4 5.8	2 2 2
..... 59	18 29	.... ..... .....	.... .... ....	.... .... ....	.... .... ....	10 11	44 49	.05....	.00....	.07 .86	262	96 .....	.... .....	330	6.1	2 2
..... 68	44 19	..............	.13	9.8........	.00 .... ....	.... 6.0	..... 27	.00....	.00 .00	.94 1.2	327	122 72	.... .....	560 .....	.... ....	2 2
..... 45	40 22	..............	.10	9.6........	.01	18 1.2	80 5.3	.00....	.00 .00	1.1 .10	270	72 88	.... .....	490 240	6.4 6.7	2 2
..... .6	23 17	.0.....	.00....	.03....	.00	9.3 14	41 62	.25....	.16 .07	.139 .09	139 205	48 50	42	173 270	6.1 5.8	1 2
..... 25	14 19	..............	.04........	.45 2.2	.01	14 4.5 9.6	62 20 42	.07 .08 .04	.07 .66 .04	.09 .27 .29	205 140 200	50 46 72	.... ..... .....	270 210 300	5.8 5.9 5.7	2 2 2
..... 40	31 19	.... ..... .....	.... .... ....	.... 2.2	.... ....	24 1.0	106 4.4	.....03	.....03	.15 1.6	..... 187	74 84	.... .....	350 280	4.4 6.0	2 2
..... 39	48 18	.... ..... .....	.... .... ....	.... 35	.01	23 7.2	102 32	.06 .08	.06 .04	.81 .08	315 191	66 64	.... .....	725 255	6.1 5.8	2 2
.....	18 52	.... ..... .....	.... .... ....	5.0....	.01	3.8	17.....	.15....	.04 .04	.41 .77	211	62 50	.... .....	325 355	6.1 6.6	2 2
..... 34	85 24	..............	.15	12 8.0	.00....	.0 6.4	.0 28	.29 .04	.05 .04	1.4 1.3	300	66 74	.... .....	490 370	6.6 6.2	2 2
.....	30 17	..............	............	.....14	.... ....	7.5 14	33 61	.....00	.04 .00	.47 .19	..... 233	66 64	.... .....	300 315	6.6 5.1	2 2
..... 18	26 12	.... ..... .....	.... .... ....	.... ....	.... ....	14 14	62 62	........	.00 .00	.15 .72	..... 281	64 108	.... .....	295 435	5.3 7.0	2 2
.....	12 67	..............	............	........	........	.8 1.8	3.5 8.0	........	.02....	.4 1.7	81 393	24 168	.... .....	115 620	6.8 6.8	2 2
..... 36 85	41 42	.... ..... 4.0	.... .... ....	.... ....	.... ....	.... 5.5	.... 24	.....15	.....10	.....63	394 277	112 98	.... .....	545 400	6.2 5.9	2 2
..... 6.0	..... 20	..............	............	........	........	.2.....	.9....	.....05	.00 ....	.... ....	78	66 .....	.... .....	70	6.6	2 2
..... .....	..... 151	..............	............	........	........	.1.....	.4 1.8	.03....	.00 .00	.03 1.1	87 177	20 46	.... .....	80 270	6.6 6.5	2 2
..... 15	..... 11	..............	............	........	........	.2 5.3	.9 23	.....03	.00 .10	.47 .13	393 127	90 58	.... .....	670 180	6.8 6.0	2 2
..... 39	12 4.0	.... ..... .....	.... .... ....	.... ....	.... ....	5.8 26	26	.02....	.00....	.07	161	56 104	.... .....	200 490	6.2 6.4	2 2
..... 11 22	..... 4.0 6.0	..............	............	........	........	.1.....	.4.....	.....02	.....00	.03 .17	56 73	18 20	.... .....	64 80	6.1 6.3	2 2
..... 49	46 48	.... ..... .....	.... .... ....	.... ....	.... ....	2.4 19	11 84	.....04	.00 .00	.72 .09	236 366	76 96	.... .....	390 390	6.9 5.5	2 2
.....	37 .....	.... ..... .....	.... .... ....	.... ....	.... ....	12	54.....	.....00	.00....	.59 .....	..... .....	104 .....	.... .....	490	6.4	2 2

TABLE 3. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE UNSEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1948-71 --CONTINUED

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A DEPTH OF WELL U BELOW F LAND FACE R (FEET)	U TEM- S PERA- E TURE E (°C)	SILICA (SI02)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	ALKA- LITY AS CAC03
1449	404048N 733148.1	05 05 70	1	18	7	..	.....	.....	.....	.....	.....	.....	.....	.....
1449	404048N 733148.1	04 06 71	1	18	7	9	.....	.....	.....	.....	.....	.....	47	39
1615	404210N 733407.1	08 03 66	1	32	7	..	.....	.....	.....	.....	.....	.....	32	26
1615	404210N 733407.1	03 31 67	1	32	7	13	15	.....	27	4.3	39	10	39	32
1615	404210N 733407.1	06 20 69	1	32	7	14	12	2.8	28	3.6	33	7.3	24	20
1616	404553N 733515.1	11 26 69	1	68	7	..	.....	.04	.....	.....	.....	.....	9	7
1631	404346N 733440.1	04 20 62	1	43	6	..	.....	.73	.....	.....	.....	.....	12	10
1631	404346N 733440.1	06 30 65	1	43	6	..	.....	.02	.....	.....	.....	.....	5	4
1707	404309N 733541.1	06 27 67	1	64	4	14	9.2	.65	18	3.1	7.7	1.6	23	19
1707	404309N 733541.1	07 05 67	1	64	4	..	.....	.02	.....	.....	.....	.....	26	21
1707	404309N 733541.1	08 22 69	1	64	4	..	.....	.21	.....	.....	.....	.....	83	68
1773	404727N 733426.1	01 30 70	4	206	5	10	1.38	.....	.....	.....	.....	.....	9	7
1829	404411N 733437.1	09 11 69	1	29	7	..	.....	.....	.....	.....	.....	.....	35	29
1937	404410N 732710.1	05 17 68	4	146	5	11	.....	.18	.....	.....	.....	.....	2	2
1965	404330N 732655.1	08 12 64	4	169	4	13	5.4	.21	1.7	4	3.8	.6	3	2
1965	404330N 732655.1	04 28 68	4	169	4	..	.....	.25	.....	.....	.....	.....	1	1
1965	404330N 732655.1	08 28 70	4	169	4	11	6.7	.06	2.1	1.2	8.2	1.0	2	2
2042	404056N 732556.1	10 23 62	1	50	4	..	.....	.40	.....	.....	.....	.....	33	27
2042	404056N 732556.1	08 22 69	1	50	4	12	.....	.30	.....	.....	.....	.....	117	96
2048	404144N 733016.1	06 20 69	1	60	3	..	9.0	.05	31	3.5	37	8.1	18	15
2400	404708N 733836.1	05 20 71	4	439	5	..	8.3	.40	.....	3.5	1.4	4.9	.5	8
2402	404401N 733149.1	11 26 47	1	85	5	..	.....	.03	.....	.....	.....	.....	15	12
2402	404401N 733149.1	07 29 49	1	85	5	..	.....	.02	.....	.....	.....	.....	6	5
2402	404401N 733149.2	01 21 52	4	207	5	..	7.8	.04	.....	.....	.....	.....	4	3
2402	404401N 733149.2	05 19 66	4	207	5	..	.....	.00	.....	.....	.....	.....	6	5
2402	404401N 733149.2	07 03 68	4	207	5	..	.....	.14	.....	.....	.....	.....	21	17
2403	404400N 733142.1	07 08 48	1	84	5	..	.....	.06	.....	.....	.....	.....	.....	.....
2403	404400N 733142.1	01 21 52	1	84	5	..	9.1	.04	45	7.3	15	2.6	9	7
2403	404400N 733142.1	06 30 65	1	84	5	..	.....	.14	.....	.....	.....	.....	11	9
2418	404404N 733632.1	10 15 62	1	71	4	..	.....	.02	.....	.....	.....	.....	37	30
2418	404404N 733632.1	07 14 66	1	71	4	16	6.7	.00	7.3	2.5	12	1.2	26	21
2422	404441N 733651.1	10 10 62	4	110	6	..	.....	.6	.....	.....	.....	.....	23	19
2580	404323N 733144.1	05 31 68	4	357	5	11	.....	.02	.....	.....	.....	.....	4	3
2581	404324N 733126.1	01 21 52	1	81	5	..	9.1	.01	37	4.4	16	3.0	12	10
2581	404324N 733126.1	06 22 63	1	81	5	..	.....	.00	.....	.....	.....	.....	11	9
2581	404324N 733126.1	06 13 65	1	81	5	..	.....	.05	2.6	.....	.....	.....	18	15
2588	404402N 733357.1	10 15 62	4	103	4	..	.....	.12	.....	.....	.....	.....	16	13
2602	404518N 733424.1	08 25 70	6	800	5	..	6.3	.....	1.1	.5	2.5	.4	8	6
2626	404439N 733659.1	10 10 62	4	150	4	..	.....	.12	.....	.....	.....	.....	16	13
2627	404439N 733659.1	08 08 68	4	180	1	..	.....	.02	1.1	.....	.....	.....	21	17
2639	404108N 732544.1	10 23 62	1	54	4	..	.....	.08	.....	.....	.....	.....	32	26
2639	404108N 732544.1	06 18 68	1	54	4	..	.....	.08	.....	.....	.....	.....	66	54
2747	404446N 733650.1	09 29 54	4	328	5	..	.....	.00	.....	.....	.....	.....	6	5
2747	404446N 733650.1	11 08 67	4	328	5	12	.....	.00	.....	.....	.....	.....	9	7
2923	404409N 733352.1	09 10 62	4	112	3	..	.....	.13	.....	.....	.....	.....	4	3
2923	404409N 733352.1	06 18 68	4	112	3	..	.....	.16	.....	.....	.....	.....	7	6
3129	404402N 733352.1	09 10 62	4	138	3	..	.....	.04	.....	.....	.....	.....	9	7
3129	404402N 733352.1	06 18 68	4	138	3	..	.....	.10	.....	.....	.....	.....	5	4
3194	404338N 733047.1	03 27 52	4	255	5	..	.....	.07	.....	.....	.....	.....	6	5
3194	404338N 733047.1	11 16 61	4	255	5	..	.....	.00	.....	.....	.....	.....	1	1
3194	404338N 733047.1	05 31 68	4	255	5	11	.....	.04	.....	.....	.....	.....	2	2
3243	404344N 733356.1	10 18 60	4	297	3	..	.....	.22	.....	.....	.....	.....	4	3
3243	404344N 733356.1	04 08 68	4	297	3	..	.....	.04	.....	.....	.....	.....	4	3
3355	404619N 732706.1	06 25 51	6	93	7	14	9.2	.00	18	2.2	.8	3.8	13	11
3427	404049N 732948.1	11 04 53	4	161	5	..	.....	.7	.....	.....	.....	.....	2	2
3427	404049N 732948.1	05 21 68	4	161	5	..	.....	1.3	.....	.....	.....	.....	2	2
3437	404002N 733332.1	07 17 64	4	169	5	..	.....	.53	.....	.....	.....	.....	5	4
3463	404132N 733113.1	06 06 68	4	299	5	..	.....	.12	.....	.....	.....	.....	2	2
3465	404306N 733330.1	04 24 52	4	297	5	..	.....	.15	.....	.....	.....	.....	4	3
3465	404306N 733330.1	03 09 60	4	297	5	..	.....	.10	.....	.....	.....	.....	4	3
3465	404306N 733330.1	04 26 68	4	297	5	12	.....	.06	.....	.....	.....	.....	2	2
3488	404455N 733101.1	05 21 68	4	168	5	..	.....	.02	.....	.....	.....	.....	11	9
3552	404453N 733204.1	05 21 68	4	169	5	13	.....	.04	.....	.....	.....	.....	12	10
3552	404455N 733204.1	09 02 70	4	169	5	12	.....	.08	.....	.....	.....	.....	13	11
3564	404050N 732948.3	05 16 52	1	69	5	..	.....	.03	.....	.....	.....	.....	5	4
3564	404050N 732948.3	05 10 63	1	69	5	..	.....	.18	.....	.....	.....	.....	20	16
3564	404050N 732948.3	07 17 68	1	69	5	..	.....	.1	1.0	.....	.....	.....	20	16
3564	404050N 732948.3	08 24 71	1	69	5	..	9.6	.05	18	26	4.5	34	30	25
3570	403900N 733346.1	10 22 62	4	129	4	..	.....	.30	.....	.....	.....	.....	11	9
3570	403900N 733346.1	07 21 66	4	129	4	13	.....	.3	.....	.....	.....	.....	.....	.....
3570	403900N 733346.1	07 21 66	4	129	4	13	.....	.....	.....	.....	.....	.....	2	2
3584	404507N 733232.1	10 26 67	4	107	2	..	.....	.09	.....	.....	.....	.....	18	15
3699	404449N 733707.1	10 10 62	1	89	4	..	.....	.04	.....	.....	.....	.....	37	30
3699	404449N 733707.1	08 25 66	1	89	4	..	.....	1.3	.....	.....	.....	.....	.....	.....
3699	404449N 733707.1	08 25 66	1	89	4	..	.....	.....	.....	.....	.....	.....	20	16

SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	AL- BUMIN- OID NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NITRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO PHOS- PHATE (PO4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA,MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHOS/CM AT 25°C)	PH	A N A L Y S I S
.....	30	....	...	.....	....	.4	1.8	....	.00	.15	.....	72	....	270	6.8	2
45	26	....	....	.60	.00	.3	1.3	.07	.05	.14	.....	74	....	320	6.5	2
.....	24	....	.09	4.0	.26	19	84	....	....	.36	.....	96	....	400	6.1	2
51	33	.1	....	.....	....	18	80	....	....	....	294	85	53	457	6.2	1
56	36	.0	....	.....	.12	15	67	.01	.00	.28	274	85	16	424	5.9	1
37	21	....	....	.....	....	8.0	35	.04	.00	.04	182	70	....	235	6.1	2
.....	8.4	....	.01	.06	.00	2.8	12	....	....	.00	66	28	....	.....	6.1	2
.....	13	....	.03	.03	.06	7.7	34	....	....	.00	171	50	....	.....	5.4	2
38	9.5	.0	.01	.....	....	1.8	7.8	.02	....	.00	108	58	39	177	6.3	1
.....	8.0	....	.01	.05	.01	1.9	8.4	....	....	.04	.....	62	....	170	6.2	2
19	10	....	....	.....	....	.2	.9	.05	....	.05	97	52	....	150	7.1	2
.....	5.6	....	.00	.00	.00	.0	.2	....	....	.00	70	40	8	30	6.7	2
16	19	....	....	.....	....	.2	.9	....	.09	.19	96	20	....	130	6.6	2
.....	6.2	....	....	.00	.00	1.3	5.7	....	....	.00	40	7	....	.....	5.1	2
1.6	4.8	.1	....	.....	....	1.2	5.3	....	....	.00	24	6	3	38	5.4	1
.....	10	....	.00	.03	.00	2.2	9.7	....	....	.00	63	9	....	.....	4.7	2
6.5	11	.2	....	.29	....	2.9	13	.00	....	.09	43	10	8	82	5.1	1
.....	9.0	.1	....	.....	.01	.0	.2	....	....	.00	170	32	....	.....	6.6	3
19	18	....	....	.....	....	1.8	7.9	.09	....	.48	.....	72	....	220	6.4	2
57	46	.0	....	.....	.47	15	65	.02	.00	.31	300	92	27	438	6.0	1
4.5	5.0	.0	....	.00	.00	2.7	12	....	....	.02	46	14	8	62	6.2	1
.....	19	....	....	.00	.00	8.0	35	....	....	....	.....	136	....	.....	5.6	2
.....	15	....	....	.01	.00	9.1	40	....	....	....	.....	108	....	.....	5.7	3
2.0	12	....	....	.....	....	3.6	16	....	....	....	55	21	18	95	5.5	1
.....	17	.1	.01	.00	.00	10	44	....	....	.00	188	42	....	.....	5.1	2
.....	10	....	....	.00	.00	13	58	....	....	.00	72	20	....	.....	6.5	2
.....	18	....	....	.....	....	14	62	....	....	....	.....	120	....	.....	5.7	2
96	22	.0	....	.....	....	10	44	....	....	....	247	142	135	389	6.8	1
.....	23	.0	.03	.16	....	19	84	....	....	.01	298	98	....	.....	5.4	2
.....	13	.1	....	.....	.01	1.2	5.3	....	....	.03	80	37	....	.....	6.1	3
17	11	.0	....	.....	....	1.2	5.4	....	....	....	71	28	6	119	6.6	1
.....	16	.0	....	.....	.05	11	49	....	....	.09	110	48	....	.....	6.2	3
.....	5.6	....	....	.00	.00	1.4	6.2	....	....	.00	34	6	....	.....	5.6	2
68	20	.0	....	.....	....	12	51	....	....	....	234	110	101	333	6.5	1
.....	21	....	.03	.3	.01	14	62	....	....	.13	235	76	....	.....	5.6	2
.....	34	.0	.03	.85	.04	15	66	....	....	.1	.....	80	....	.....	5.7	2
.....	5.2	.1	....	.....	.00	.8	3.5	....	....	.00	.....	8	....	.....	5.7	3
2.7	3.5	.1	....	.04	....	.0	.2	.00	....	.00	21	4	0	30	6.5	1
.....	20	.0	....	.....	.00	6.8	30	....	....	.01	140	77	....	.....	5.6	3
56	21	....	....	.....	....	14	62	.04	.00	.15	257	93	....	330	6.2	2
.....	18	....	....	.....	.00	1.0	4.4	....	....	.26	65	53	....	.....	6.5	3
14	12	....	....	.....	....	2.7	12	.05	.00	.05	157	82	....	215	7.0	2
.....	11	.0	.00	.00	.00	4.2	19	....	....	....	.....	24	....	.....	5.8	2
.....	16	....	....	.00	.00	8.5	38	....	....	.00	143	60	....	.....	6.0	2
.....	8.6	....	.00	.00	.00	4.5	20	....	....	.02	93	40	....	.....	5.4	2
.....	11	....	....	.04	.00	7.1	31	....	....	.00	161	52	....	.....	5.9	2
.....	15	....	.01	.00	.00	6.1	27	....	....	.00	107	34	....	.....	5.5	2
.....	15	....	....	.00	.00	6.4	28	....	....	.00	155	52	....	.....	6.0	2
.....	3.9	.1	.00	.00	.00	.2	.9	....	....	....	.....	12	....	.....	5.8	2
.....	7.6	....	.00	.00	.00	4.8	21	....	....	.00	50	16	....	.....	5.6	2
.....	10	....	....	.00	.00	5.6	25	....	....	.00	96	24	....	.....	5.2	2
.....	4.2	....	.00	.00	.00	.7	3.1	....	....	.00	27	16	....	.....	5.2	2
.....	5.1	....	....	.00	.00	.8	3.5	....	....	.00	19	12	....	.....	5.6	2
.....	4.5	.0	....	.....	....	.0	.3	.0	....	....	28	9	0	38	6.8	1
8	4.8	.0	.00	.00	.00	.0	.1	....	....	....	.....	12	....	.....	5.4	2
.....	7.6	....	.00	.00	.00	.0	.2	....	....	.00	66	13	....	.....	5.2	2
.....	5.4	....	.00	.....	.00	.0	.1	....	....	.00	33	8	....	.....	5.8	2
.....	3.0	....	....	.00	.00	.0	....	....	....	.0	24	2	....	.....	5.1	2
.....	3.6	.1	.00	.00	.00	.2	.9	....	....	....	.....	5	....	.....	6.0	2
.....	6.8	....	.00	.00	.00	3.8	17	....	....	.00	68	24	....	.....	5.3	2
.....	14	....	.01	.00	.00	8.7	39	....	....	.00	127	44	....	190	5.5	2
.....	19	....	....	.00	.00	16	71	....	....	.00	252	89	....	.....	5.4	2
.....	20	....	....	.01	.00	16	71	....	....	.04	263	89	....	.....	5.6	2
36	17	....	.00	.00	.00	12	55	.06	.04	.00	223	74	....	290	6.0	2
.....	18	.1	.00	.00	.00	11	49	....	....	....	.....	98	....	.....	5.6	2
.....	17	....	.06	2.5	.00	9.0	40	....	....	1.0	209	82	....	.....	5.3	2
.....	26	....	....	.03	.00	14	62	....	....	.48	307	84	....	.....	5.5	2
78	4.5	.1	....	.13	.01	12	53	.00	.00	4.0	232	83	59	398	6.4	1
.....	2.2	.0	....	.....	.00	.0	.1	....	....	.00	20	8	....	.....	5.2	3
6.5	.....	....	....	.....	....	.....	.....	....	....	....	19	....	....	23	5.2	1
.....	5.0	....	.01	.00	.00	.1	.4	....	.03	.00	.....	6	....	.....	....	2
.....	34	....	.01	.00	.00	11	49	....	....	.00	228	66	....	.....	5.9	2
.....	28	.0	....	.....	.02	13	58	....	....	.23	110	70	....	.....	5.9	3
32	.....	....	.....	.....	....	.....	.....	....	....	....	233	....	....	338	5.9	1
.....	32	....	.03	.44	.01	12	53	....	.06	.05	.....	72	....	.....	....	2

TABLE 3. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE UNSEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1948-71 --CONTINUED

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A DEPTH Q OF WELL U BELOW I LAND F SUR- FACE R (FEET)	U TEM- PERA- TURE (°C)	SILICA (SiO ₂)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO ₃)	ALKA- LITY AS CaCO ₃
3758	404435N 733718.1	10 10 62	1	91	1	..	..	..	..	..	..	..	44	36
3758	404435N 733718.1	03 12 70	1	91	1	..	..	..	..	..	..	..	28	23
3780	404228N 732935.1	06 12 52	4	142	5	..	..	..	..	..	..	..	2	2
3780	404228N 732935.1	06 13 68	4	142	5	..	..	..	..	..	..	..	5	4
3838	404800N 733109.1	10 17 62	4	163	4	..	..	..	..	..	..	..	12	10
3874	404746N 733100.1	09 19 67	4	335	4	..	..	..	..	..	..	..	4	3
3876	404353N 732912.1	08 13 69	4	386	5	..	..	..	..	..	..	..	5	4
3876	404353N 732912.1	12 07 71	4	386	5	..	6.8	..	3.1	1.1	14	.7	3	2
3878	404624N 733233.1	06 11 70	4	428	5	13	..	..	..	..	..	..	9	7
3893	404228N 732934.1	04 29 53	4	151	5	..	..	..	..	..	..	..	4	3
3893	404228N 732934.1	02 21 62	4	151	5	..	..	..	..	..	..	..	4	3
3893	404228N 732934.1	06 13 68	4	151	5	13	..	..	..	..	..	..	5	4
3895	404119N 733230.1	07 14 65	4	414	5	..	..	..	..	..	..	..	1	1
3895	404119N 733230.1	06 06 68	4	414	5	13	..	..	..	..	..	..	1	1
3899	404549N 733046.1	08 27 69	1	134	1	21	..	..	..	..	..	..	12	10
3925	404648N 733329.1	10 17 62	1	143	4	..	..	..	..	..	..	..	13	11
3925	404648N 733329.1	09 13 67	1	143	4	..	..	..	..	..	..	..	560	460
4042	404309N 732745.1	10 28 53	4	154	5	..	..	..	..	..	..	..	4	3
4042	404309N 732745.1	08 02 67	4	154	5	12	8.4	.07	.12	.01	8.1	2.3	13	1.7
4042	404309N 732745.1	08 02 67	4	154	5	..	..	..	..	..	..	..	5	4
4042	404309N 732745.1	12 05 68	4	154	5	11	..	..	..	..	..	..	1	1
4095	404636N 732807.1	06 23 67	4	495	5	..	..	..	..	..	..	..	4	3
4063	404533N 732849.1	03 07 68	4	233	5	11	..	..	..	..	..	..	4	3
4133	404805N 733030.1	08 24 71	4	450	5	..	7.7	.02	.10	..	16	5.8	30	2.6
4246	404802N 733132.1	05 13 71	4	453	5	12	10	.40	..	..	7.0	2.4	5.9	.9
4383	404528N 733351.1	09 13 67	4	136	4	..	..	..	..	..	..	..	5	4
4383	404528N 733351.1	03 12 70	4	136	4	..	..	..	..	..	..	..	16	13
4394	404001N 734019.1	08 29 67	4	175	5	..	..	1.7	.17	..	..	..	10	8
4410	404415N 733508.1	10 23 62	4	115	4	..	..	..	..	..	..	..	10	8
4410	404415N 733508.1	07 14 66	4	115	4	13	6.3	.00	.02	..	2.0	.8	4.6	.6
4410	404415N 733508.1	07 14 66	4	115	4	..	..	..	..	..	..	..	2	2
4461	404050N 732948.1	06 26 54	4	176	5	..	..	..	..	..	..	..	1	1
4461	404050N 732948.1	06 26 54	4	176	5	..	..	..	..	..	..	..	1	1
4461	404050N 732948.1	07 17 64	4	176	5	..	..	..	..	..	..	..	6	5
4461	404050N 732948.1	07 17 68	4	176	5	12	..	1.5	..	..	..	..	4	3
4463	404336N 732844.1	10 29 62	1	124	9	..	..	..	..	..	..	..	46	38
4463	404336N 732844.1	08 02 67	1	124	9	..	..	..	..	..	..	..	39	32
4633	404720N 733324.1	09 21 67	1	216	3	..	..	..	..	..	..	..	10	8
4756	404207N 733455.1	04 26 68	4	312	5	12	..	..	..	..	..	..	1	1
5149	404553N 733101.1	10 22 62	4	189	1	..	..	..	..	..	..	..	21	17
5180	404153N 733110.1	12 11 62	1	34	4	..	..	..	..	..	..	..	20	16
5259	404120N 733225.1	12 19 65	4	312	5	..	..	..	..	..	..	..	2	2
5301	404428N 733152.1	07 27 70	4	382	5	12	..	..	..	..	..	..	2	4
5302	404246N 733143.1	06 26 70	4	489	5	14	..	..	..	..	..	..	4	3
5336	404441N 733208.1	09 18 69	4	523	5	..	..	..	..	..	..	..	6	5
5368	404526N 733014.1	10 10 62	4	150	4	..	..	..	..	..	..	..	20	16
5368	404526N 733014.1	08 25 66	4	150	4	13	..	..	..	..	..	..	38	31
5368	404526N 733014.1	08 25 66	4	150	4	13	..	..	..	..	..	..	..	..
5507	404414N 733647.1	10 15 62	4	314	1	..	..	2.0	..	..	..	..	18	15
5588	404335N 732945.1	11 19 62	1	52	4	..	..	..	..	..	..	..	21	17
5588	404335N 732945.1	08 10 66	1	52	4	..	..	..	..	..	..	..	..	..
5588	404335N 732945.1	08 10 66	1	52	4	..	..	..	..	..	..	..	11	9
5608	404544N 733715.1	09 20 67	1	73	3	..	..	..	..	..	..	..	15	12
5654	404451N 733526.1	12 04 67	4	335	5	..	..	..	..	..	..	..	4	3
5677	404845N 733047.1	10 17 62	4	257	1	..	..	..	..	..	..	..	18	15
5706	404307N 732728.1	12 18 62	1	61	1	..	..	..	..	..	..	..	20	16
5796	404706N 733002.1	12 19 62	1	168	4	..	..	..	..	..	..	..	17	14
5859	404536N 733201.1	12 17 62	1	84	4	..	..	..	..	..	..	..	34	28
5859	404536N 733201.1	08 03 66	1	84	4	..	..	..	..	..	..	..	..	..
5859	404536N 733201.1	08 03 66	1	84	4	..	..	..	..	..	..	..	16	13
5859	404536N 733201.1	08 02 67	1	84	4	..	..	..	..	..	..	..	15	12
5899	404607N 733127.1	11 19 62	1	99	4	..	..	..	..	..	..	..	12	10
6036	404021N 733019.1	12 11 62	1	47	4	..	..	..	..	..	..	..	29	24
6036	404021N 733019.1	06 07 68	1	47	4	..	..	..	..	..	..	..	17	14
6072	404330N 733300.1	12 10 62	1	39	4	..	..	..	..	..	..	..	49	40
6076	404650N 732911.1	07 16 68	4	358	5	..	..	..	..	..	..	..	4	3
6151	404943N 733011.1	09 15 67	1	177	4	..	..	..	..	..	..	..	24	20
6315	404525N 733626.1	07 18 66	4	348	5	13	12	.03	.08	..	5.7	2.7	6.7	.8
6315	404525N 733626.1	07 18 66	4	348	5	13	12	.03	.08	..	5.7	2.7	6.7	.8
6360	404507N 733016.1	12 17 62	1	79	4	..	..	..	..	..	..	..	49	40
6361	404334N 733140.1	11 19 62	1	35	8	..	..	..	..	..	..	..	15	12
6361	404334N 733140.1	08 03 66	1	35	8	16	9.4	.16	.48	..	22	4.1	34	4.2
6376	404637N 732702.1	10 23 62	1	240	4	..	..	..	..	..	..	..	11	9
6376	404637N 732702.1	10 20 65	1	240	4	..	..	..	..	..	..	..	4	3
6462	404440N 733007.1	12 17 62	4	317	4	..	..	..	..	..	..	..	20	16

SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	AL- BUMIN- OID NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NITRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO PHOS- PHATE (PO4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHOS/CM AT 25°C)	PH	A N A L Y S I S
.....	14	.0	...	.....	.01	6.6	29	.....	.....	.5	160	74	.....	.....	6.1	3
47	16	.....	.....	.....	.....	6.8	30	.04	.02	.18	179	88	.....	265	6.4	2
.....	17	.1	.00	.00	.00	5.6	25	.....	.....	.....	.....	53	.....	.....	5.6	2
.....	22	.....	.....	.04	.00	15	66	.....	.....	.13	228	80	.....	.....	5.3	2
.....	7.0	.0	.....	.....	.00	1.1	4.8	.....	.....	.00	45	14	.....	.....	5.9	3
.....	18	.....	.00	.00	.00	1.7	7.5	.....	.04	.00	115	34	.....	140	5.7	2
.....	10	.....	.....	.00	.....	4.2	19	.....	.....	.00	61	14	.....	95	4.7	2
3.4	13	.....	.....	.07	.01	4.5	20	.01	.....	.09	66	12	10	111	5.2	1
1.0	6.8	.....	.00	.00	.00	2.6	12	.03	.00	.00	77	18	.....	65	6.4	2
.....	14	.0	.01	.01	.00	5.4	24	.....	.....	.....	.....	56	.....	.....	5.2	2
.....	15	.....	.01	.03	.00	7.6	34	.....	.....	.06	150	52	.....	.....	5.1	2
.....	20	.....	.....	.02	.00	12	53	.....	.....	.09	189	64	.....	270	5.3	2
.....	4.6	.....	.00	.00	.00	.0	.....	.....	.....	.00	17	4	.....	.....	4.7	2
.....	4.6	.....	.....	.00	.00	.0	.1	.....	.....	.00	34	4	.....	.....	4.7	2
26	31	.....	.....	.....	.....	7.3	32	.05	.00	.05	213	66	.....	260	5.9	2
.....	10	.....	.....	.....	.00	3.2	14	.....	.....	.00	70	30	.....	.....	6.3	3
.....	49	.....	.16	1.0	.01	3.0	13	.....	.02	.02	391	54	.....	600	7.4	2
.....	5.6	.0	.00	.00	.00	.6	2.6	.....	.....	.....	.....	6	.....	.....	5.5	2
14	13	.3	.....	.....	.....	5.4	24	.....	.....	.2	98	30	26	147	5.4	1
.....	.....	.....	.01	.23	.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
.....	13	.....	.....	.12	.00	6.2	27	.....	.....	.09	103	33	.....	.....	5.1	2
.....	3.6	.....	.00	.01	.00	.5	2.2	.....	.....	.00	20	4	.....	.....	5.9	2
.....	12	.....	.....	.00	.00	7.8	35	.....	.....	.0	123	45	.....	.....	5.1	2
39	35	.0	.....	1.0	.01	3.0	13	.00	.00	.09	169	64	33	291	6.7	1
4.8	8.3	.0	.....	.00	.00	4.3	19	.00	.....	.05	74	27	18	97	6.2	1
.....	6.5	.....	.01	.14	.01	2.4	11	.....	.00	.00	50	11	.....	61	6.5	2
6.0	17	.....	.....	.4	.....	16	71	.02	.00	.10	137	80	.....	190	6.0	2
.....	19	.....	.....	.....	.00	.2	.9	.....	.....	.35	162	63	.....	.....	5.4	2
.....	8.8	.0	.....	.....	.00	.4	1.8	.....	.....	.00	85	13	.....	.....	5.5	3
1.4	7.5	.0	.....	.....	.....	1.9	8.3	.....	.....	.....	37	8	6	48	5.6	1
.....	.....	.....	.00	.00	.00	.....	.....	.....	.02	.00	.....	.....	.....	.....	.....	2
.....	5.2	.0	.00	.00	.00	.0	.1	.....	.....	.....	.....	8	.....	.....	5.4	2
.....	5.2	.1	.00	.0	.00	.0	.1	.....	.....	.....	.....	8	.....	.....	5.4	2
.....	8.8	.....	.00	.00	.00	.0	.2	.....	.....	.00	61	14	.....	.....	5.2	2
.....	11	.....	.00	.01	.00	.1	.4	.....	.....	.00	75	15	.....	.....	5.2	2
.....	6.2	.1	.....	.....	.00	.1	.4	.....	.....	.05	40	30	.....	.....	6.5	3
.....	5.0	.....	.01	.16	.00	.4	1.8	.....	.....	.00	59	28	.....	.....	7.4	2
.....	5.6	.....	.00	.00	.00	4.1	18	.....	.....	.00	98	30	.....	.....	6.4	2
.....	4.0	.....	.00	.00	.00	.0	.....	.....	.....	.00	19	6	.....	.....	5.3	2
.....	16	.1	.....	.....	.....	11	49	.....	.....	.02	275	80	.....	.....	5.6	3
.....	13	.0	.....	.....	.00	4.5	20	.....	.....	.00	105	48	.....	.....	5.9	3
.....	8.6	.....	.00	.02	.00	.5	2.2	.....	.....	.00	56	12	.....	.....	4.3	2
4.0	18	.....	.04	.00	.00	6.6	29	.04	.00	.00	109	30	.....	130	5.6	2
.....	3.0	.0	.00	.00	.00	.0	.1	.03	.00	.00	21	14	.....	40	5.9	2
.....	4.2	.....	.....	.00	.....	.6	2.7	.....	.....	.00	38	8	.....	35	6.1	2
.....	24	.0	.....	.....	.02	7.2	32	.....	.....	.3	440	150	.....	.....	5.6	3
73	25	.....	.02	.09	.01	7.8	35	.....	.06	.07	.....	90	.....	.....	.....	2
.....	.....	.....	.....	.....	.....	.....	.....	.05	.....	.....	236	.....	.....	378	6.3	1
.....	9.5	.1	.....	.....	.02	4.3	19	.....	.....	.00	50	26	.....	.....	6.0	3
.....	14	.1	.....	.....	.01	7.2	32	.....	.....	.52	170	92	.....	.....	6.0	3
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	190	.....	.....	258	6.1	1
.....	18	.....	.02	.32	.00	11	49	.39	.02	.25	.....	72	.....	.....	.....	2
.....	8.0	.....	.02	.16	.01	5.2	23	.....	.02	.04	.....	76	.....	218	6.6	2
.....	16	.....	.....	.03	.00	8.5	38	.....	.....	.00	110	31	.....	.....	5.5	2
.....	12	.....	.....	.....	.01	4.8	21	.....	.....	.00	130	46	.....	.....	6.1	3
.....	16	.....	.....	.....	.00	12	53	.....	.....	.3	182	104	.....	.....	6.1	3
.....	6.7	.0	.....	.....	.01	1.2	5.3	.....	.....	.06	30	32	.....	.....	6.1	3
.....	12	.....	.....	.....	.17	6.3	28	.....	.....	.07	150	62	.....	.....	6.5	3
33	.....	.....	.....	.....	.....	.....	.....	.06	.....	.....	234	.....	.....	313	6.3	1
.....	20	.....	.02	.04	.00	12	53	.....	.01	.02	.....	86	.....	.....	5.8	2
.....	32	.....	.02	.18	.02	24	115	.07	.03	.11	.....	112	.....	480	5.9	2
.....	24	.2	.....	.....	.00	19	84	.....	.....	.64	290	94	.....	.....	4.9	3
.....	19	.5	.0	.....	.00	2.5	11	.....	.....	.52	150	60	.....	.....	6.1	3
11	11	.....	.....	.....	.....	3.8	17	.02	.00	.3	110	36	.....	141	6.4	2
.....	7.7	.0	.....	.....	.00	3.0	13	.....	.....	.02	90	64	.....	.....	8.3	3
.....	9.4	.....	.....	.00	.00	3.6	16	.....	.....	.00	68	26	.....	.....	5.6	2
.....	11	.....	.01	.08	.00	4.6	20	.....	.04	.00	164	44	.....	.....	7.0	2
1.2	7.6	.1	.....	.....	.....	4.3	19	.....	.....	.....	70	25	12	98	6.4	1
1.2	7.6	.1	.....	.....	.....	4.3	19	.....	.....	.....	70	25	12	98	6.4	1
.....	12	.0	.....	.....	.2	6.5	29	.....	.....	.05	130	50	.....	.....	7.0	3
.....	16	.0	.....	.....	.01	14	62	.....	.....	.37	235	80	.....	.....	5.5	3
35	45	.2	.....	.....	.....	10	46	.02	.02	.1	220	72	56	352	6.8	1
.....	9.2	.6	.....	.....	.00	.8	3.5	.....	.....	.00	80	19	.....	.....	5.6	3
.....	11	.....	.....	.....	.....	4.1	18	.....	.....	.00	72	64	.....	.....	5.1	2
.....	10	.0	.....	.....	.02	5.2	23	.....	.....	.03	55	26	.....	.....	6.3	3

TABLE 3. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE UNSEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1948-71 --CONTINUED

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A DEPTH Q OF WELL U F F R (FEET)	U TEM- S PERA- TURE (°C)	SILICA (SiO2)	TOTAL IRON (FE)	MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	ALKA- LITY AS CaCO3
6479	404206N 732746.1	12 18 62	1	28	4 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
6584	404025N 732949.1	12 11 62	1	55	4 ..	.....	.07	1.00	.....	.....	.....	.....	59	48
6584	404025N 732949.1	06 09 68	1	55	4 ..	.....	.06	1.82	.....	.....	.....	.....	52	43
6655	404534N 733243.1	10 22 62	4	236	4 ..	.....	.08	.00	.....	.....	.....	.....	10	8
6655	404534N 733243.1	03 12 70	4	236	4 ..	.....	.00	.00	.....	.....	.....	.....	9	7
6664	404227N 732946.1	06 24 63	1	28	3 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
6664	404227N 732946.1	07 03 64	1	28	3 ..	.....	.58	.48	.....	.....	.....	.....	6	5
6664	404227N 732946.1	10 21 66	1	28	3 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
6664	404227N 732946.1	10 21 66	1	28	3 14	.....	.51	.85	30	3.9	36	11	10	8
6664	404227N 732946.1	01 27 67	1	28	3 10	.....	1.2	1.4	.....	.....	.....	.....	13	11
6664	404227N 732946.1	03 31 67	1	28	3 ..	.....	.75	1.4	.....	.....	.....	.....	17	14
6664	404227N 732946.1	06 14 67	1	28	3 12	.....	.39	1.0	.....	.....	.....	.....	10	8
6664	404227N 732946.1	08 02 67	1	28	3 ..	.....	.44	.67	.....	.....	.....	.....	10	8
6664	404227N 732946.1	09 12 67	1	28	3 ..	.....	.61	.79	.....	.....	.....	.....	7	6
6664	404227N 732946.1	10 31 67	1	28	3 14	.....	1.4	.67	.....	.....	.....	.....	10	8
6664	404227N 732946.1	12 05 67	1	28	3 13	.....	.67	.....	.23	.....	.....	.....	.....	.....
6664	404227N 732946.1	01 20 68	1	28	3 14	.....	.44	.24	.....	.....	.....	.....	4	3
6664	404227N 732946.1	03 29 68	1	28	3 13	.....	.78	.....	.20	53	7.2	.....	2	2
6664	404227N 732946.1	06 04 68	1	28	3 13	.....	.66	.37	.11	.....	.....	.....	1	1
6664	404227N 732946.1	09 10 68	1	28	3 14	.....	.50	.87	.07	.....	.....	.....	7	6
6664	404227N 732946.1	10 29 68	1	28	3 14	.....	1.2	.34	.08	.....	.....	.....	7	6
6664	404227N 732946.1	03 18 69	1	28	3 13	.....	.10	.17	.15	.....	.....	.....	7	6
6664	404227N 732946.1	06 04 69	1	28	3 ..	.....	.37	.00	.07	.....	.....	.....	6	5
6664	404227N 732946.1	07 28 69	1	28	3 14	.....	.53	.00	.....	.....	.....	.....	9	7
6664	404227N 732946.1	04 19 70	1	28	3 12	.....	.66	.79	.11	.....	.....	.....	11	9
6664	404227N 732946.1	08 28 70	1	28	3 ..	10	.64	.53	23	2.5	30	7.1	16	13
6664	404227N 732946.1	05 25 71	1	28	3 ..	13	.40	.80	28	3.1	28	8.0	11	9
6683	404507N 733011.1	11 19 62	4	135	4 ..	.....	1.5	.00	.....	.....	.....	.....	13	11
6683	404507N 733011.1	08 10 66	4	135	4 ..	5.0	2.2	.16	11	5.0	15	2.0	14	12
6683	404507N 733011.1	08 10 66	4	135	4 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
6762	404134N 733142.1	12 05 62	1	51	4 ..	.....	.05	.2	.....	.....	.....	.....	27	22
6764	404047N 732659.1	12 18 62	1	66	4 ..	.....	.00	.00	.....	.....	.....	.....	63	52
6764	404047N 732659.1	06 21 68	1	66	4 ..	.....	.06	.05	.04	.....	.....	.....	77	63
6781	404434N 732853.1	12 17 62	1	74	4 ..	.....	.06	.00	.....	.....	.....	.....	13	11
6808	403938N 733314.1	01 08 63	1	26	3 ..	.....	.20	1.4	.....	.....	.....	.....	73	60
6808	403938N 733314.1	08 03 66	1	26	3 13	.....	.....	.....	.....	.....	.....	.....	39	32
6808	403938N 733314.1	08 03 66	1	26	3 13	.....	.11	1.8	.....	.....	.....	.....	.....	.....
6808	403938N 733314.1	06 19 68	1	26	3 ..	.....	.06	2.2	.....	.....	.....	.....	52	43
6812	404604N 733601.1	09 13 67	1	97	1 ..	.....	.09	.06	.....	.....	.....	.....	23	19
6899	404414N 733501.1	12 17 62	1	28	4 ..	.....	.06	.00	.....	.....	.....	.....	17	14
6911	403901N 732930.1	12 11 62	4	90	4 ..	.....	1.4	.00	.....	.....	.....	.....	24	20
6954	404029N 733035.1	03 02 65	1	60	4 ..	.....	1.1	.08	.....	.....	.....	.....	12	10
6954	404029N 733035.1	06 17 68	1	60	4 13	.....	.06	.14	.....	.....	.....	.....	27	22
6980	404909N 733033.1	08 15 67	1	225	4 ..	.....	.00	.03	.....	.....	.....	.....	15	12
6996	404528N 733040.1	10 22 62	1	120	4 ..	.....	.22	.03	.....	.....	.....	.....	15	12
6996	404528N 733040.1	08 10 66	1	120	4 ..	9.7	.07	.19	25	5.4	19	3.0	8	6
6996	404528N 733040.1	08 10 66	1	120	4 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
7004	404536N 733026.1	11 19 62	4	150	4 ..	.....	.20	.00	.....	.....	.....	.....	15	12
7034	404917N 733039.1	10 17 62	1	232	3 ..	.....	.04	.00	.....	.....	.....	.....	22	18
7034	404917N 733039.1	09 25 67	1	232	3 ..	.....	.02	.00	.....	.....	.....	.....	15	12
7034	404917N 733039.1	07 14 71	1	232	3 ..	.....	.00	.00	.06	.....	.....	.....	16	13
7036	404316N 733633.1	12 10 62	1	30	4 ..	.....	1.8	2.2	.....	.....	.....	.....	29	24
7045	404727N 733426.2	08 24 70	4	249	5 12	.....	.04	.00	.....	.....	.....	.....	6	5
7046	404622N 732912.1	12 19 62	4	151	4 ..	.....	.5	.00	.....	.....	.....	.....	41	34
7166	404441N 733653.1	08 08 68	4	322	4 ..	.....	.06	.00	.08	.....	.....	.....	7	6
7198	404129N 733141.1	12 05 62	1	36	4 ..	.....	2.2	.26	.....	.....	.....	.....	32	26
7198	404129N 733141.1	12 05 62	1	36	4 ..	.....	2.2	.26	.....	.....	.....	.....	32	26
7333	404035N 732743.1	03 05 65	1	55	4 ..	.....	1.6	1.4	.....	.....	.....	.....	39	32
7438	404426N 732717.1	10 03 69	4	550	3 ..	.....	.66	.00	.....	.....	.....	.....	4	3
7470	404522N 733410.1	09 13 67	1	62	4 ..	.....	.02	.11	.05	.....	.....	.....	45	37
7500	404418N 733454.1	07 18 66	4	458	5 13	9.0	.02	.01	1.6	.6	3.4	.4	10	8
7690	404211N 732559.1	12 21 64	1	16	7 ..	8.2	.82	.70	19	4.2	30	5.7	28	23
7690	404211N 732559.1	01 22 68	1	16	7 13	.....	.11	1.5	5.6	.....	.....	.....	28	23
7690	404211N 732559.1	04 09 68	1	16	7 12	.....	.45	1.4	2.	.....	.....	.....	29	24
7691	404208N 732559.1	12 21 64	1	16	7 ..	5.5	.60	.23	21	3.8	19	3.2	14	12
7691	404208N 732559.1	08 31 67	1	16	7 16	.....	.47	.45	1.1	.....	.....	.....	12	10
7691	404208N 732559.1	01 22 68	1	16	7 7	.....	.58	.63	1.6	.....	.....	.....	17	14
7691	404208N 732559.1	04 09 68	1	16	7 7	.....	.18	.52	.....	.....	.....	.....	15	12
7691	404208N 732559.1	12 05 68	1	16	7 11	.....	.16	.08	.45	.....	.....	.....	7	6
7691	404208N 732559.1	03 23 70	1	16	7 ..	.....	.25	.14	.30	.....	.....	.....	11	9
7692	404137N 732936.1	12 21 64	1	20	7 ..	7.6	1.8	.49	24	5.8	28	6.6	12	10
7692	404137N 732936.1	11 17 66	1	20	7 14	.....	.42	.75	.....	.....	.....	.....	34	28
7692	404137N 732936.1	08 17 67	1	20	7 ..	.....	.82	.79	1.0	.....	.....	.....	28	23
7692	404137N 732936.1	04 09 68	1	20	7 11	.....	1.0	.63	.72	.....	.....	.....	27	22
7692	404137N 732936.1	12 05 68	1	20	7 13	.....	.53	.37	.94	.....	.....	.....	21	17

SULFATE (SQ4)	CHLORIDE (CL)	FLUORIDE (F)	AL- BUMIN- NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NITRATE (NO3)	TOTAL PHOS- PHATE (PD4)	ORTHO PHOS- PHATE (PD4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCTI- VANCE (MICRO- MHOS/CM AT 25°C)	PH	A N A L Y S I S T
.....	26	.....	.27	2.0	.03	3.7	16	.....	.....	.....	172	.....	.....	.....	.....	3
.....	8.5	.0	.....	.....	.00	4.8	21	.....	.....	.28	200	108	.....	.....	6.8	3
23	11	.....	.....	.....	.....	4.8	21	.25	.20	.3	171	86	.....	242	7.0	2
.....	9.2	.0	.....	.....	.00	3.5	19	.....	.....	.00	82	30	.....	.....	5.7	3
70	25	.....	.....	.....	.....	5.9	26	.....	.....	.10	189	64	.....	290	5.8	2
.....	21	.....	.....	.....	.....	14	62	.....	.....	.7	.....	.....	.....	.....	5.7	2
64	26	.....	.....	.8	.07	18	80	.....	.02	.16	346	100	.....	460	5.2	2
.....	.....	.....	.09	3.5	.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
68	28	.1	.....	.....	.....	19	85	.01	.00	.4	304	91	83	469	5.5	1
.....	33	.....	.12	4.5	.01	25	111	.....	.....	.4	.....	102	.....	390	5.5	2
.....	30	.....	.....	.....	.....	21	93	.03	.01	.28	359	132	.....	.....	6.0	2
.....	33	.....	.....	.....	.....	24	106	.07	.04	.32	.....	114	.....	530	5.7	2
.....	28	.....	.06	2.3	.00	18	80	.....	.03	.17	357	100	.....	.....	5.8	2
.....	31	.....	.10	3.5	.00	20	89	.09	.....	.4	360	106	.....	530	5.9	2
.....	30	.....	.16	7.4	.....	13	58	.....	.00	.41	303	84	.....	480	6.0	2
.....	26	.....	.....	.....	.....	13	58	.....	.00	.3	277	84	.....	405	6.0	2
.....	28	.....	.....	.....	.....	16	71	.04	.00	.22	290	88	.....	410	5.3	2
141	27	.....	.24	7.5	.00	13	58	.02	.02	.32	465	168	.....	700	4.7	2
45	31	.....	.07	1.8	.00	18	80	.02	.02	.21	.....	86	.....	430	5.2	2
133	29	.....	.....	.....	.....	12	53	.04	.00	.15	358	88	.....	550	5.3	2
74	29	.....	.11	4.2	.00	19	84	.05	.00	.18	.....	72	.....	475	5.6	2
57	31	.....	.10	1.3	.00	24	106	.03	.00	.37	.....	86	.....	420	5.4	2
73	28	.2	.12	.54	.00	20	89	.02	.02	.18	321	80	.....	.....	5.2	2
78	27	.....	.50	.00	.00	.....	.....	.16	.03	.17	323	78	.....	420	6.2	2
54	23	.....	.....	.....	.....	15	66	.04	.00	.16	.....	88	.....	330	5.6	2
52	19	.1	.11	1.6	.04	15	68	.01	.....	.30	239	68	54	364	5.8	1
50	22	.1	.....	1.1	.01	20	88	.....	.....	.23	318	83	74	372	5.7	1
.....	12	.1	.....	.....	.04	9.0	40	.....	.....	.14	115	38	.....	.....	6.2	3
11	25	.0	.....	.....	.....	6.8	30	.....	.....	.....	118	48	36	224	6.6	1
.....	.....	.....	.02	3.0	.25	.....	.....	.04	.04	.05	.....	.....	.....	.....	.....	2
.....	20	.0	.23	2.4	.00	11	49	.....	.....	1.6	185	88	.....	.....	5.6	3
.....	7.2	.0	.....	.....	.00	.1	.4	.....	.....	.09	50	80	.....	.....	7.3	3
12	13	.....	.....	.....	.....	1.5	7.0	.....	.18	.29	146	90	.....	.....	7.2	2
.....	10	.0	.....	.....	.00	6.7	30	.....	.....	.3	80	42	.....	.....	5.4	3
.....	14	.1	.00	1.25	.00	.4	1.8	.....	.....	1.3	160	40	.....	.....	6.6	3
.....	10	.....	.02	2.3	.00	2.8	12	.....	.01	.59	.....	45	.....	180	6.3	2
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	127	.....	.....	191	6.7	1
22	16	.....	.....	.....	.....	1.3	5.7	.05	.00	2.4	.....	46	.....	270	7.5	2
.....	12	.....	.01	.07	.00	5.3	23	.....	.00	.00	144	65	.....	189	6.7	2
.....	8.0	.0	.....	.....	.00	3.5	15	.....	.....	.03	65	58	.....	.....	5.5	3
.....	7.2	.0	.....	.....	.00	.0	.....	.....	.....	.00	55	16	.....	.....	6.6	3
.....	6.4	.....	.00	.00	.02	1.2	5.3	.....	.....	.00	74	32	.....	.....	6.0	2
33	16	.....	.....	.....	.....	8.0	35	.03	.00	.53	189	72	.....	280	6.4	2
.....	16	.....	.01	.10	.00	5.3	23	.....	.02	.03	190	65	.....	.....	6.5	2
.....	17	.1	.....	.....	.00	9.4	42	.....	.....	.00	230	87	.....	.....	5.7	3
63	24	.0	.....	.....	.....	6.8	30	.....	.....	.....	186	84	78	305	6.0	1
.....	.....	.01	.00	.00	.....	.....	.....	.14	.06	.05	.....	.....	.....	.....	.....	2
.....	13	.1	.....	.....	.01	7.4	33	.....	.....	.1	150	54	.....	.....	5.6	3
.....	10	.0	.....	.....	.00	4.8	21	.....	.....	.00	123	56	.....	.....	6.0	3
.....	10	.....	.00	.00	.00	3.2	14	.....	.....	.00	126	53	.....	.....	6.0	2
28	18	.....	.05	.12	.00	5.8	26	.03	.00	.04	172	64	.....	200	6.6	2
.....	9.7	.2	.....	.....	.02	3.0	13	.....	.....	.08	155	118	.....	.....	6.1	3
.....	5.4	.....	.01	.00	.....	.0	.0	.....	.....	.00	21	6	.....	30	.....	2
.....	27	.0	.00	.07	.01	.0	.....	.....	.....	.95	180	130	.....	.....	6.3	3
9.0	14	.....	.....	.....	.....	7.3	32	.03	.03	.03	126	36	.....	150	6.5	2
.....	16	.0	.26	2.0	.08	8.8	39	.....	.....	1.1	155	72	.....	.....	6.0	3
.....	16	.0	.26	2.0	.08	8.8	39	.....	.....	1.1	155	72	.....	.....	6.0	3
.....	28	.....	.10	2.2	.03	3.8	17	.....	.....	.71	164	58	.....	.....	6.6	2
.....	5.2	.....	.00	.00	.00	.0	.2	.....	.....	.00	18	12	.....	35	5.5	2
.....	24	.....	.04	.14	.02	6.6	29	.....	.07	.05	235	114	.....	335	6.7	2
.....	3.4	.1	.....	.....	.....	.5	2.0	.....	.....	.....	26	6	0	33	6.3	1
42	40	.1	.....	.....	.....	3.6	16	.10	.....	.4	179	65	42	326	6.7	1
.....	42	.....	.....	.....	.....	5.4	24	.03	.00	.47	210	65	.....	360	6.6	2
.....	41	.....	.06	4.0	.00	7.1	31	.04	.04	.48	222	66	.....	320	6.4	2
34	35	.0	.....	.....	.....	3.6	16	.09	.....	.2	149	68	56	260	6.4	1
.....	14	.....	.02	.24	.00	2.8	13	.04	.00	.03	97	31	.....	135	6.6	2
.....	25	.....	.....	.....	.....	3.1	14	.07	.00	.18	136	42	.....	190	6.4	2
.....	35 0	.....	.03	.5	.00	2.9	13	.05	.03	.11	158	54	.....	270	6.2	2
10	4.0	.....	.00	.35	.00	.4	1.8	.02	.00	.03	46	14	.....	.....	6.7	2
25	27	.....	.....	.....	.....	4.2	19	.07	.02	.07	111	52	.....	200	5.8	2
74	27	.0	.....	.....	.....	6.6	29	.07	.....	.2	214	84	74	352	6.5	1
.....	52	.....	.12	1.8	.00	11	49	.08	.07	.47	352	108	.....	540	5.8	2
.....	112	.....	.10	4	.01	10	44	.11	.11	.25	418	140	.....	700	6.2	2
.....	51	.....	.07	2.25	.00	7.0	31	.04	.02	.17	298	112	.....	480	6.2	2
60	54	.....	.10	2.0	.04	8.6	38	.02	.02	.11	.....	102	.....	450	6.3	2

TABLE 3. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE UNSEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1948-71 --CONTINUED

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A DEPTH Q OF WELL U BELOW I LAND F FACE R (FEET)	U TEM- S PERA- TURE (°C)	SILICA (SiO ₂)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO ₃)	ALKA- LITY AS CaCO ₃
7692	404137N 732936.1	03 23 70	1 20	7 10	.....	1.4	.05	.90	.....	.....	.....	.....	28	23
7694	404216N 733256.1	12 07 64	1 16	7 ..	13	1.1	1.6	.....	27	4.2	49	8.4	97	80
7694	404216N 733256.1	03 29 65	1 16	7 ..	12	1.2	1.3	.....	33	6.2	40	11	80	66
7694	404216N 733256.1	11 18 66	1 16	7 ..	.....	1	1.3	.....	.....	.....	.....	.....	69	56
7694	404216N 733256.1	08 17 67	1 16	7 ..	.....	.18	.45	1.6	.....	.....	.....	.....	51	42
7694	404216N 733256.1	01 22 68	1 16	7 12	.....	.05	.75	1.8	.....	.....	.....	.....	67	55
7694	404216N 733256.1	04 09 68	1 16	7 11	.....	.06	.37	1.1	.....	.....	.....	.....	71	58
7694	404216N 733256.1	08 15 67	1 16	7 16	.....	.23	.17	1.8	.....	.....	.....	.....	73	60
7694	404216N 733256.1	03 24 70	1 16	7 10	.....	.06	.00	.35	.....	.....	.....	.....	38	31
7696	404310N 733057.2	12 07 64	1 26	7 14	13	5.4	.45	.....	21	3.5	39	5.5	80	66
7696	404310N 733057.1	03 29 65	1 26	7 ..	12	5.6	.71	.....	24	4.9	52	5.7	75	61
7696	404310N 733057.1	12 09 66	1 29	7 ..	.....	.02	.22	.....	.....	.....	.....	.....	64	53
7696	404310N 733057.1	10 15 67	1 29	7 ..	14	1.8	.20	2.6	20	2.7	67	6.3	78	63
7696	404310N 733057.1	08 15 67	1 29	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7696	404310N 733057.1	12 05 67	1 29	7 17	.....	1.4	.11	1.8	.....	.....	.....	.....	57	47
7696	404310N 733057.1	01 15 68	1 29	7 ..	.....	.....	.....	5.5	.....	.....	.....	.....	.....	.....
7696	404310N 733057.1	01 22 68	1 29	7 ..	.....	.09	.30	1.8	.....	.....	.....	.....	73	60
7696	404310N 733057.1	02 05 68	1 29	7 ..	.....	.16	.24	1.6	.....	.....	.....	.....	74	61
7696	404310N 733057.1	03 25 68	1 29	7 ..	.....	.25	.27	1.9	.....	.....	.....	.....	66	54
7696	404310N 733057.1	06 07 68	1 29	7 17	.....	.....	.....	1.4	.....	.....	.....	.....	.....	.....
7696	404310N 733057.1	06 20 68	1 29	7 18	.....	.1	.08	.....	.....	.....	.....	.....	66	54
7696	404310N 733057.1	10 30 68	1 29	7 18	.....	1.9	.37	2.8	.....	.....	.....	.....	90	74
7696	404310N 733057.1	03 24 70	1 29	7 15	.....	.75	1.2	.70	.....	.....	.....	.....	73	60
7696	404310N 733057.1	11 10 71	1 29	7 18	.....	1.1	.90	.....	.....	.....	.....	.....	101	83
7705	404530N 733644.1	01 16 67	1 66	7 ..	5.1	.16	.04	.....	8.3	1.1	4.8	2.1	14	12
7773	405010N 733059.1	05 13 71	4 476	5 ..	12	.05	.00	.....	5.0	2.1	5.4	.8	19	16
7858	404828N 733228.1	10 04 67	4 375	3 ..	.....	.09	.00	.....	.....	.....	.....	.....	41	34
7858	404828N 733228.1	06 16 71	4 375	3 ..	8.7	.21	.00	.....	3.5	.9	4.0	1.0	13	11
7950	404037N 732807.2	10 01 65	1 12	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7950	404037N 732807.3	10 01 65	1 18	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7950	404037N 732807.4	10 01 65	1 22	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7950	404037N 732807.5	10 01 65	1 28	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7950	404037N 732807.1	10 01 65	1 33	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7950	404037N 732807.1	12 01 66	1 33	7 ..	.....	2.0	2.2	.....	.....	.....	.....	.....	30	25
7950	404037N 732807.1	06 28 67	1 33	7 ..	.....	.....	.....	.54	.....	.....	.....	.....	.....	.....
7950	404037N 732807.1	08 31 67	1 33	7 15	9.2	.86	1.5	.46	26	4.4	27	8.2	27	22
7950	404037N 732807.1	04 09 68	1 33	7 13	.....	.58	1.4	.88	.....	.....	.....	.....	24	20
7950	404037N 732807.1	06 21 68	1 33	7 ..	.....	.12	1.7	.....	.....	.....	.....	.....	27	22
7950	404037N 732807.1	10 29 68	1 33	7 14	.....	1.2	2.2	1.2	.....	.....	.....	.....	26	21
7950	404037N 732807.1	12 08 70	1 33	7 ..	.....	.66	1.8	.....	.....	.....	.....	.....	24	20
7950	404037N 732807.2	05 24 71	1 33	7 ..	8.6	.54	2.3	.....	28	4.0	34	8.2	24	20
8023	404838N 733102.1	09 15 67	1 200	3 11	.....	.00	.00	.23	.....	.....	.....	.....	15	12
8031	404045N 733116.1	02 25 69	4 510	5 ..	.....	.28	.00	.....	.....	.....	.....	.....	4	3
8031	404045N 733116.1	08 24 71	4 510	5 ..	6.2	.16	.01	.....	.3	.1	2.4	.4	3	2
8035	404327N 732657.1	03 05 68	1 72	7 13	.....	.00	5.2	1.1	.....	.....	.....	.....	43	35
8162	403900N 733132.1	05 22 70	4 154	3 ..	.....	.78	.05	.....	.....	.....	.....	.....	6	5
8162	403900N 733132.1	06 09 71	4 154	3 15	7.1	.84	.04	.00	1.4	.5	2.6	.5	6	5
8193	404328N 732701.1	11 07 62	1 54	7 14	8.3	1.8	.48	.....	10	2.6	15	4.6	2	2
8193	404328N 732701.1	04 28 67	1 54	7 ..	.....	2.4	1.8	.....	.....	.....	.....	.....	10	8
8194	404311N 732659.1	11 07 62	1 70	7 16	13	.22	.50	.....	4.8	1.1	39	5.7	19	16
8194	404311N 732659.1	04 28 67	1 70	7 ..	.....	.09	.67	1.8	.....	.....	.....	.....	26	21
8194	404311N 732659.1	03 11 68	1 70	7 13	.....	.21	1.9	.....	.....	.....	.....	.....	63	52
8197	403954N 733206.1	04 08 64	1 32	2 ..	.....	.11	.....	.....	.....	.....	.....	.....	11	9
8202	404040N 732619.1	03 05 65	1 40	8 ..	.....	1.2	.00	.....	.....	.....	.....	.....	52	43
8321	404401N 733151.3	06 10 68	4 674	5 ..	.....	.21	.00	.....	.....	.....	.....	.....	10	8
8321	404401N 733151.3	08 25 70	4 674	5 ..	5.7	.22	.01	.....	2.3	.4	3.4	.3	10	8
8364	404633N 733010.1	08 21 68	4 190	1 14	.....	.06	.00	.29	.....	.....	.....	.....	6	5
8402	404254N 733609.1	08 12 68	1 38	6 14	.....	.02	.....	2.8	.....	.....	.....	.....	38	31
8417	404310N 732700.1	03 25 68	4 92	7 ..	.....	.66	.05	.88	.....	.....	.....	.....	6	5
8423	404447N 733519.1	03 12 70	4 96	1 ..	.....	.06	.00	.....	.....	.....	.....	.....	10	8
8436	404712N 733102.1	01 11 70	4 188	4 ..	.....	.00	.30	.....	.....	.....	.....	.....	11	10
8498	404329N 732657.1	03 05 68	1 69	7 14	.....	.00	1.7	6.5	.....	.....	.....	.....	38	31
8529	403940N 732916.2	05 12 70	4 74	7 ..	.....	.06	.00	.....	.....	.....	.....	.....	23	19
8582	404226N 732944.2	05 07 69	1 23	7 13	.....	.02	.3	1.4	.....	.....	.....	.....	26	21
8582	404226N 732944.3	05 07 69	1 28	7 13	.....	.....	.....	.....	.....	.....	.....	.....	10	8
8582	404226N 732944.5	05 07 69	1 38	7 14	.....	.....	.....	.....	.....	.....	.....	.....	17	14
8582	404226N 732944.7	05 07 69	1 53	7 14	.....	.....	.....	.....	.....	.....	.....	.....	33	27
8582	404226N 732944.8	05 07 69	1 63	7 14	.....	.02	.22	.....	.....	.....	.....	.....	.....	.....
8582	404226N 732944.1	05 12 69	1 68	7 14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8582	404226N 732944.1	06 06 69	1 68	7 13	9.2	.01	.00	.....	16	2.5	17	1.4	22	18
8582	404226N 732944.1	04 19 70	1 68	7 12	.....	.12	.00	2.4	.....	.....	.....	.....	26	21
8582	404226N 732944.1	06 02 70	1 68	7 ..	.....	.08	.00	.....	.....	.....	.....	.....	20	16
8582	404226N 732944.1	05 21 71	1 68	7 13	.....	.53	.08	2.7	.....	.....	.....	.....	21	17
8586	404301N 733059.1	05 13 69	1 23	7 ..	.....	.04	.08	1.12	.....	.....	.....	.....	7	6
8586	404301N 733059.2	05 13 69	1 28	7 14	.....	.....	.....	.....	.....	.....	.....	.....	11	9

SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	AL- BUMIN- OID NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NITRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO PHOS- PHATE (PO4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA,MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHOS/CM AT 25°C)	PH	AN- AL- Y S T
62	61	....	...	....	....	8.7	38	.07	.07	.12	302	98	....	430	6.0	2
36	24	.1	...	....	....	13	57	.08	....	1.0	280	85	....	422	7.6	1
45	32	.1	...	....	....	14	62	.34	....	.7	290	108	38	438	6.9	1
....	34	....	.12	1.2	.00	36	160	.08	.01	.41	....	122	....	640	6.2	2
....	46	....	.14	8.6	.01	12	53	.07	.05	.81	290	50	....	525	6.3	2
....	28	....	...	....	....	35	155	.04	.00	.28	381	90	....	550	6.7	2
....	28	....	.13	1.3	.00	21	93	.04	.02	.23	316	92	....	500	6.7	2
49	34	....	.13	.48	.00	24	106	....	.04	.25	371	96	....	550	6.8	2
24	19	....	...	....	....	13	60	.05	.05	.13	221	98	....	260	6.9	2
26	25	.1	...	....	....	7.5	33	.13	....	.5	210	67	2	332	6.9	1
24	63	.1	...	....	....	5.7	25	.39	....	.4	256	80	18	417	6.6	1
....	31	....	.07	.84	.00	6.8	30	.04	.04	1.0	238	44	....	370	6.2	2
52	54	.1	...	....	....	4.3	19	.03	....	.60	289	61	....	469	7.1	1
....	....	....	.15	.40	.09	....	....	....	....	....	....	....	....	....	....	2
....	34	....	...	....	....	4.8	21	.07	.00	.48	255	66	....	340	6.8	2
....	52	....	...	....	....	2.8	12	....	....	.45	....	....	....	400	6.1	2
....	42	....	...	....	....	6.1	27	.10	.00	.98	265	72	....	410	6.7	2
....	40	....	...	....	....	6.4	28	.07	.00	.79	273	72	....	440	6.5	2
....	46	....	...	....	....	7.5	33	.02	.00	.61	292	82	....	460	6.5	2
....	....	....	...	....	....	....	....	.02	.00	.72	....	....	....	560	7.2	2
27	45	....	...	....	....	8.2	36	.09	.07	.61	265	72	....	422	6.7	2
55	40	....	.10	1.7	.01	5.3	23	....	.02	1.2	282	72	....	470	6.8	2
46	62	....	...	....	....	5.5	24	.60	.56	.50	326	102	....	450	6.6	2
40	49	....	.10	1.4	.00	2.5	11	2.1	2.1	1.4	296	58	....	440	6.4	2
13	2.5	.1	...	....	....	2.2	9.6	.03	.01	.04	70	25	14	93	6.8	1
2.3	8.0	.1	.24	.01	.00	2.1	9.4	.00	....	.03	56	21	6	78	6.3	1
....	6.2	....	....	.04	.01	1.6	7.1	....	....	.00	96	38	....	....	9.5	2
2.0	5.0	.0	.09	.04	.00	2.0	9.0	.00	....	.05	47	12	2	54	6.5	1
....	55	....	...	....	....	5.2	23	....	....	.02	....	....	....	....	....	2
....	32	....	...	....	....	1.2	5.3	....	....	1.5	....	....	....	....	....	2
....	29	....	...	....	....	5.6	25	....	....	1.5	....	....	....	....	....	2
....	23	....	...	....	....	9.4	42	....	....	1.0	....	....	....	....	....	2
....	18	....	...	....	....	8.2	36	....	....	1.2	....	....	....	....	....	2
....	23	....	.07	4.0	.00	5.1	23	.08	.03	1.8	248	82	....	360	5.7	2
....	27	....	.07	4.8	.00	9.5	42	.1	.34	1.9	283	....	....	390	6.0	2
64	32	.0	...	....	....	9.3	41	.10	....	1.5	223	83	61	404	5.9	1
....	22	....	.06	4.5	.00	10	44	.07	.02	1.1	253	86	....	400	6.1	2
58	23	....	...	....	....	12	53	....	.05	1.4	....	98	....	400	6.3	2
78	33	....	.08	5.5	.00	15	66	.02	.02	1.4	287	100	....	450	6.2	2
53	34	....	.10	5.5	.00	23	102	.05	.03	.88	316	92	....	....	6.2	2
64	32	.1	...	6.2	.01	18	81	....	....	.72	282	86	67	447	5.8	1
....	9.0	....	.01	.09	.00	3.8	17	....	.00	.02	154	39	....	....	6.7	2
....	3.6	....	....	.00	....	.0	.1	....	....	.00	16	2	....	25	5.2	2
2.8	3.1	.0	....	....	....	.0	.0	.00	.00	.01	17	1	0	36	5.6	1
....	34	....	...	....	....	1.1	4.9	.00	.00	.35	542	160	....	....	7.0	2
4.0	4.0	....	...	....	....	.1	.3	.08	.07	.05	38	34	....	30	6.2	2
2.5	3.6	.1	.00	.03	.00	.0	.0	....	....	.01	22	5	1	28	5.7	1
41	16	.2	....	....	....	3.6	16	....	....	.26	116	36	34	209	4.8	1
....	16	....	...	....	....	3.4	15	.08	.06	.77	134	38	....	220	6.0	2
57	16	.1	...	....	....	3.6	16	....	....	.26	173	17	1	270	6.2	1
....	19	....	...	....	....	4.5	20	....	....	.61	224	24	....	300	6.7	2
....	15	....	.09	2.0	.18	7.6	34	.00	.00	.23	....	46	....	350	6.7	2
....	13	....	...	....	.01	6.5	29	....	....	.74	....	....	....	....	5.4	2
....	11	....	.02	.05	.01	.6	2.7	....	....	.1	98	58	....	....	6.9	2
....	4.4	....	...	.00	....	.1	.4	....	....	.00	78	8	....	78	6.1	2
2.5	5.0	.1	...	.00	....	.1	.5	.00	....	.00	15	7	0	34	6.6	1
8.0	23	....	...	....	....	5.8	26	.00	.00	.00	128	46	....	180	5.9	2
20	6.0	....	...	....	....	3.6	16	.09	.00	.00	91	20	....	155	6.3	2
....	23	....	...	....	....	.1	.4	.02	.00	.00	141	46	....	220	6.0	2
38	28	....	...	....	....	3.6	16	.02	.00	.05	135	58	....	215	6.2	2
27	17	....	...	....	....	5.3	23	.02	.00	.06	131	64	....	185	6.0	2
....	34	....	...	....	....	8.8	39	.08	.00	.23	446	102	....	690	6.5	2
3.0	4.0	....	...	....	....	.1	.4	.05	.00	.04	42	20	....	55	6.8	2
68	31	....	...	....	....	28	124	.05	.0	.27	378	100	....	540	6.0	2
60	27	....	...	....	....	20	89	.02	.02	.22	271	92	....	430	5.7	2
59	29	....	...	....	....	18	80	....	.0	.16	287	96	....	420	6.0	2
42	26	....	...	....	....	15	66	....	.00	.27	264	92	....	380	6.3	2
....	19	....	...	....	....	9.0	40	....	.00	.17	188	....	....	240	5.8	2
38	20	....	...	....	....	4.8	21	....	.00	.13	....	54	....	220	6.2	2
31	20	.0	...	....	....	5.6	25	.02	....	.12	132	50	32	219	6.8	1
29	21	....	...	....	....	3.8	17	.05	.00	.17	152	56	....	200	6.5	2
31	24	....	...	....	....	5.4	24	.07	.04	.17	....	54	....	220	7.0	2
31	27	....	.1	.22	.00	3.6	16	.08	.01	.19	172	54	....	245	6.3	2
30	17	....	...	....	....	5.8	26	.03	.0	.10	140	56	....	190	6.0	2
25	27	....	...	....	....	9.0	40	.05	.0	.22	179	48	....	240	6.8	2

TABLE 3. -- CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS IN THE UNSEWERED AREA,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1948-71 --CONTINUED

WELL NUMBER	LOCATION	DATE OF COL- LEC- TION	A DEPTH Q OF WELL U BELOW I LAND F SUR- FACE R (FEET)	U TEM- PERA- TURE (°C)	SILICA (SiO ₂)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	ZINC (ZN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO ₃)	ALKA- LITY AS CaCO ₃
8586	404301N 733059.3	05 13 69	1 33	7 ..	.....	.02	.27	.....	.....	.....	.....	.....	.....	.....
8586	404301N 733059.5	05 13 69	1 43	7 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8586	404301N 733059.6	05 13 69	1 53	7 14	.....	.02	1.21	.....	.....	.....	.....	.....	27	22
8586	404301N 733059.7	05 28 69	1 58	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8586	404301N 733059.7	03 25 70	1 58	7 10	.....	.47	.67	2.4	.....	.....	.....	.....	24	20
8602	404536N 733200.1	08 27 69	1 84	4 ..	.....	.....	.....	.....	.....	.....	.....	.....	70	57
8613	403948N 732728.3	10 10 69	1 72	7 ..	.....	.....	.....	.....	.....	.....	.....	.....	109	89
8649	403855N 733114.2	05 08 70	1 30	7 ..	.....	.14	.00	.01	.....	.....	.....	.....	290	264
8658	404816N 733429.1	08 24 71	4 550	5 ..	6.8	.02	.00	.03	1.0	.2	2.4	.3	8	6
8666	404424N 733656.2	06 23 71	1 67	1 13	.....	.15	.05	.1	.....	.....	.....	.....	26	21
8706	403855N 733114.2	05 08 70	4 375	7 ..	.....	1.4	.00	.14	.....	.....	.....	.....	54	44

SULFATE (SO4)	CHLORIDE (CL)	FLUO- RIDE (F)	AL- BUMIN- DID NITRO- GEN (N)	AM- MONIA NI- TROGEN (N)	NI- TRITE NI- TROGEN (N)	NI- TRATE NI- TROGEN (N)	NITRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO PHOS- PHATE (PO4)	MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA,MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO- MHOS/CM AT 25°C)	PH	A N A L Y S T
26	19	....	...	.....	....	6.0	27	....	.05	.09	.....	40	....	200	6.0	2
25	21	....	...	.....	....	5.6	25	....	.0	.15	.....	....	....	205	6.3	2
35	28	....	...	.....	....	8.2	36	....	.04	.08	.....	64	....	290	....	2
.....	30	....	...	.....	....	8.9	39	....	.00	.25	220	....	....	320	6.5	2
27	56	....	...	.....	....	5.0	22	.05	.04	.12	226	68	....	340	6.8	2
28	25	....	...	.....	....	9.2	41	.04	.00	.04	274	46	....	370	6.8	2
17	4.0	....	...	.....	....	.0	.1	.02	.00	.09	103	64	....	140	7.5	2
2.0	1880	....	...	.....	....	....	....	2.4	2.3	.15	3702	680	....	....	7.5	2
1.0	4.1	....	...	.05	.00	.0	.0	.00	....	.01	20	3	0	36	6.5	1
47	10	....	.10	.23	.00	3.0	13	.08	.06	.09	175	90	....	230	6.0	2
4.0	41	....	...	.....	....	....	....	.18	.04	.12	139	28	....	220	7.7	2

TABLE 4. -- CHEMICAL ANALYSES OF WATER FROM STREAMS IN SEWERED AND UNSEWERED AREAS,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1966-71

DATE OF COLLECTION	OIS- CHARGE (CFS)	TEM- PERA- TURE (°C)	SILICA (SiO2)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	ALKA- LINITY AS CACO3	SUL- FATE (SO4)	CHLOR- IDE (CL)	NI- TRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO- PHOS- PHATE (PO4)
SEWERED AREA																
01-3105.40 MILLBURN CREEK AT ROOSEVELT (404011N0733608)																
09 22 67	.....	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	12	....	.05
01-3105.80 MILLBURN CREEK (SUNRISE HIGHWAY) AT BALDWIN (403925N0733611)																
09 22 67	.....	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	17	....	.04
01-3106.00 MILLBURN CREEK AT BALDWIN (403904N0733613)																
12 22 66	.68	3	.....	.09	.48	.....	.....	.....	.....	48	39	.....	20	21	.04	.04
01 04 67	.74	5	.....	.18	1.6	.....	.....	.....	.....	45	37	.....	34	14	.04	.01
08 18 67	1.3	..	.....	.07	.05	.....	.....	.....	.....	44	36	.....	25	28	.05	.....
11 30 67	1.2	..	.....	.....	.....	.....	.....	.....	.....	39	32	.....	25	30	....	.02
02 19 68	3.92	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	.....	.....	.....
02 23 68	3.92	..	.....	.05	1.3	.....	.....	.....	.....	48	39	.....	27	29	.00	.00
04 03 68	3.5	11	.....	.06	1.4	.....	.....	.....	.....	48	39	.....	24	26	.02	.00
05 06 68	3.96	..	.....	.08	1.4	.....	.....	.....	.....	49	40	.....	25	26	.04	.00
10 16 68	.95	18	.....	.06	1.2	.....	.....	.....	.....	49	40	52	26	32	.05	.02
06 11 69	8.5	..	.....	.12	.95	.....	.....	.....	.....	48	39	56	30	33	.05	.00
07 11 69	6.0	..	.....	.14	.00	.....	.....	.....	.....	37	30	41	21	17	.11	.05
11 07 69	.8	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	26	....	.03
04 13 70	5.5	..	8.6	.....	.....	31	5.2	23	5.7	60	49	56	30	33	.17	.....
12 21 70	6.5	22	.....	.23	.79	.....	.....	.....	.....	55	45	51	29	29	.25	.06
03 03 71	4.0	22	.....	.00	.00	.....	.....	.....	.....	50	41	54	30	27	.05	.04
01-3108.00 SOUTH POND OUTLET AT ROCKVILLE CENTRE (404000N0733908)																
05 05 66	.09	..	.....	1.5	.40	.....	.....	.....	.....	17	14	34	19	.7	....	.....
01 04 67	.04	8	.....	.....	.....	.....	.....	.....	.....	32	26	.....	25	1.0	....	.....
08 18 67	.04	..	.....	.20	.05	.....	.....	.....	.....	13	11	.....	20	.3	.03	.....
02 19 68	.07	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	.....	.....	.....
02 23 68	.05	..	.....	.18	.34	.....	.....	.....	.....	16	13	.....	24	1.2	.72	.00
04 03 68	.14	12	.....	.81	.08	.....	.....	.....	.....	11	9	.....	20	1.1	.04	.04
08 23 68	.1	22	.....	.10	.00	.....	.....	.....	.....	6	5	41	24	.2	.03	.02
07 15 69	.11	..	.....	.....	.00	.....	.....	.....	.....	34	28	32	27	.....	.33	.30
01-3110.00 PINES BROOK AT MALVERNE (404001N0733935)																
05 05 66	.04	13	2.3	.62	.72	25	6.0	12	3.3	48	39	50	15	5.7	....	.....
03 13 67	.29	3	.....	.32	1.3	.....	.....	.....	.....	46	38	.....	20	6.4	.06	.03
08 18 67	.07	..	.....	.13	.00	.....	.....	.....	.....	68	56	.....	18	1.1	.07	.....
11 20 67	.03	2	.....	.22	.....	.....	.....	.....	.....	49	40	.....	20	3.5	....	.02
12 15 67	.22	3	9.1	.....	.....	27	7.5	14	3.9	46	38	56	19	13	.11	.07
02 02 68	.22	..	10	.....	.....	29	8.7	16	4.3	41	34	73	20	16	.04	.01
04 03 68	.36	12	.....	.42	1.5	.....	.....	.....	.....	49	40	.....	20	14	.07	.05
04 19 68	.20	12	.....	.23	.05	.....	.....	.....	.....	52	43	.....	20	13	.04	.04
04 30 68	.20	..	.....	.23	1.1	.....	.....	.....	.....	50	41	.....	21	14	.05	.00
06 03 68	.20	..	.....	.61	.95	.....	.....	.....	.....	59	48	.....	20	13	.05	.04
06 07 68	.10	..	8.9	.....	.....	24	8.2	16	3.0	54	44	52	22	3.0	.00	.....
01 13 69	.17	..	.....	.12	.14	.....	.....	.....	.....	51	42	54	24	13	.05	.00
05 07 69	.3	..	4.0	.....	.....	30	7.8	16	3.8	54	44	59	20	8.9	.04	.....
12 15 69	.21	..	3.3	.....	.....	12	3.3	5.0	2.2	31	25	18	8.0	2.7	.20	.....
01 30 70	.10	..	.....	.32	.67	.....	.....	.....	.....	47	39	41	240	4.3	.11	.08
03 12 70	.17	..	.....	.06	.00	.....	.....	.....	.....	54	44	45	26	12	.07	.05
04 19 71	.2	15	7.6	2.1	1.5	29	5.4	25	6.7	57	47	46	39	18	.04	.....
01-3112.00 MOTTS CREEK AT VALLEY STREAM (403901N0734245)																
12 22 66	.30	3	.....	.24	.17	.....	.....	.....	.....	20	16	.....	30	5.3	.03	.02
04 03 68	.14	16	.....	.30	2.0	.....	.....	.....	.....	61	50	.....	19	11	.05	.05
08 23 68	.00	26	.....	.00	.00	.....	.....	.....	.....	21	17	10	3.0	.4	.09	.07
02 18 70	1.39	..	.....	.72	1.1	.....	.....	.....	.....	60	49	36	76	14	.09	.04
01-3115.00 VALLEY STREAM AT VALLEY STREAM (403949N0734218)																
08 14 67	.00	26	3.9	.....	.....	17	3.5	62	3.3	56	46	19	90	1.8	.06	.....
12 15 67	.00	4	1.1	.....	.....	6.1	1.3	6.9	1.0	16	13	10	12	.6	.17	.07
02 02 68	1.9	..	1.3	.....	.....	14	2.6	43	2.0	19	15	22	69	2.8	.08	.03
04 03 68	.50	13	.....	.53	.00	.....	.....	.....	.....	56	46	.....	18	.8	.11	.09
04 19 68	.14	17	.....	.06	.00	.....	.....	.....	.....	57	47	.....	20	.5	.04	.03
06 07 68	.50	..	1.9	.....	.....	18	4.1	10	2.9	48	40	19	16	3.3	.20	.....
03 12 70	.46	..	.....	.08	.00	.....	.....	.....	.....	62	51	48	31	2.7	.08	.04
04 02 70	39	..	.....	.14	.00	.....	.....	.....	.....	24	20	13	98	.0	.16	.07
06 03 70	.6	..	4.7	.....	.....	22	.....	42	2.9	54	44	21	62	3.9	.72	.....
01-3117.00 VALLEY STREAM BELOW WEST BRANCH AT VALLEY STREAM (403947N0734221)																
12 15 69	.73	..	1.5	.....	.....	8.4	1.9	12	1.3	20	16	14	19	1.6	.16	.....

[CHEMICAL CONSTITUENTS, DISSOLVED-SOLIDS CONTENT, ALKALINITY, AND HARDNESS GIVEN IN MILLIGRAMS PER LITER. DISCHARGE (CFS) IS CUBIC FEET PER SECOND. LOCATION OF SAMPLING SITES SHOWN ON PLATE 1. THE STATION NUMBER OF EACH SAMPLING SITE IS SHOWN AT THE LEFT OF THE STREAM NAME, AND THE LATITUDE AND LONGITUDE ARE SHOWN AT THE RIGHT. SEE TABLE 2 FOR ADDITIONAL EXPLANATION OF COLUMN HEADINGS.]

MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO MHOS/CM AT 25°C)	PH	LOAD, IN POUNDS PER DAY				A N L Y S T
						NI- TRATE (NO3)	MBAS	TOTAL PHOS- PHATE (PO4)	DIS- SOLVED SOLIDS	
.15	247	150	....	410	7.1	.....	.....	.....	.....	2
.10	....	106	....	295	7.0	.....	.....	.....	.....	2
.09	205	102	....	335	7.2	77	.33	.15	752	2
.19	....	90	....	259	6.9	56	.76	.16	.....	2
.36	....	94	....	360	6.5	196	2.5	.35	.....	2
.88	229	91	....	350	6.8	194	5.7	.13	1480	2
.21	220	....	....	370	5.5	.....	4.4	.....	4650	2
.41	240	104	....	385	7.3	613	8.7	.....	5080	2
.31	244	100	....	370	6.9	491	5.8	.38	4610	2
.31	....	102	....	350	6.7	555	6.6	.85	.....	2
.29	....	100	....	370	6.8	164	1.5	.26	.....	2
.27	244	100	....	370	6.4	1510	12	2.3	11200	2
.30	....	70	....	260	6.4	550	9.7	3.6	.....	2
.36	246	....	....	350	6.9	.....	.....	.....	.....	2
.22	214	99	50	342	6.6	.....	.....	.....	.....	1
.47	226	90	....	350	6.6	.....	.....	.....	.....	2
.36	237	96	....	365	7.0	582	7.8	1.1	5100	2
.00	100	49	35	173	6.4	.34	.00	.....	48	1
.00	....	68	....	184	6.9	.22	.00	.....	.....	2
.05	143	58	....	200	6.8	.06	.01	.01	31	2
.08	160	....	....	....	5.8	.....	.03	.....	60	2
.00	137	70	....	225	7.3	.32	.00	.19	37	2
.00	154	56	....	200	7.3	.83	.00	.03	116	2
.00	....	58	....	210	6.4	.11	.00	.02	.....	2
.05	146	58	....	210	7.5	.....	.03	.20	87	2
.20	159	87	48	257	6.7	1.2	.04	.....	34	1
.23	....	111	....	335	7.2	10	.36	.09	.....	2
.25	182	99	....	290	7.2	.42	.09	.03	69	2
.22	197	90	....	279	7.4	.57	.04	.00	32	2
.23	174	98	61	295	6.7	15	.27	.13	206	1
.23	199	108	75	304	6.9	19	.27	.05	236	1
.43	249	106	....	340	7.3	27	.83	.14	484	2
.40	222	107	....	340	6.9	14	.43	.04	239	2
.37	210	106	....	....	7.1	15	.40	.05	226	2
.32	....	102	....	260	7.1	14	.34	.05	.....	2
.32	170	94	50	308	6.8	1.6	.17	.00	92	1
.21	214	104	....	315	6.9	12	.19	.04	196	2
.14	184	107	63	299	7.1	14	.23	.06	298	1
.08	71	44	18	110	6.8	3.0	.09	.23	80	1
.25	....	88	....	700	6.8	2.3	.13	.06	.....	2
.24	199	100	....	330	6.8	.....	.....	.....	.....	2
.20	217	95	48	361	5.1	19	.2	.04	232	1
.22	....	92	....	280	5.7	8.6	.36	.05	.....	2
.20	224	114	....	340	7.3	8.3	.15	.04	169	2
.15	54	24	....	70	9.1	.....	.....	.....	.....	2
.21	334	124	....	570	6.9	105	1.6	.67	2500	2
.10	227	57	11	437	7.0	.....	.....	.....	.....	1
.09	53	20	8	91	6.5	.....	.....	.....	.....	1
.18	172	46	30	325	6.6	29	1.8	.82	1760	1
.13	163	82	....	255	8.1	2.2	.35	.30	440	2
.15	214	108	....	320	6.9	.38	.11	.03	162	2
.09	110	62	22	191	6.4	8.9	.24	.54	297	1
.11	227	106	....	300	6.9	.....	.....	.....	.....	2
.14	226	38	....	380	6.7	.....	.....	.....	.....	2
.09	190	70	26	359	6.9	125	2.9	23	6120	1
.09	78	29	12	120	6.4	6.3	.35	.63	307	1

TABLE 4. -- CHEMICAL ANALYSES OF WATER FROM STREAMS IN SEWERED AND UNSEWERED AREAS,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1966-71 --CONTINUED

DATE OF COLLECTION	DIS- CHARGE (CFS)	TEM- PERA- TURE (°C)	SILICA (SI02)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	ALKA- LINITY AS CAC03	SUL- FATE (S04)	CHLOR- IDE (CL)	NI- TRATE (NO3)	TOTAL PHOS- PHATE (PO4)	ORTHO- PHOS- PHATE (PO4)
UNSEWERED AREA																
01-3093.60 CARMAN CREEK AT MASSAPEQUA PARK (404101N0732554)																
09 20 67	.....	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	39	....	.00
01-3094.00 CARMAN CREEK AT AMITYVILLE (404009N0732602)																
06 16 67	4.2	..	.....	.20	.45	.....	.....	.....	.....	38	31	.....	50	12	.23	.18
02 20 68	4.36	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23	.....	.....	.....
05 07 68	1.9	..	.....	.25	.99	.....	.....	.....	.....	34	28	.....	21	11	.....	.05
01-3094.54 MASSAPEQUA CREEK (TOMES AVE.) AT SOUTH FARMINGDALE (404255N0732700)																
11 07 62	.....	13	7.5	.38	2.2	22	3.4	24	6.2	48	39	52	18	19	....	....
05 06 69	.....	..	.....	.00	1.4	.....	.....	.....	.....	.....	.....	.....	24	57	.....	.00
01-3094.76 MASSAPEQUA CREEK (SOUTHERN ST PKWY) AT S FARMINGDALE (404221N0732705)																
10 26 66	.06	12	.....	.16	1.1	.....	.....	.....	.....	47	39	.....	21	3.5	.07	.00
01-3095.00 MASSAPEQUA CREEK AT MASSAPEQUA (404120N0732719)																
03 31 66	2.8	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	16	....	....
05 11 66	4.3	..	6.8	.36	.67	13	4.3	16	2.6	12	10	32	20	12	....	....
11 28 66	3.57	9	.....	.....	.....	.....	.....	.....	.....	32	26	.....	20	19	.06	.06
12 01 66	3.1	..	.....	.22	.52	.....	.....	.....	.....	30	25	.....	23	24	.17	.06
01 26 67	3.4	7	.....	.16	.79	.....	.....	.....	.....	33	27	.....	22	25	.04	.02
02 14 67	3.4	..	9.6	.28	.87	15	4.0	24	4.1	11	9	35	27	29	....	....
04 12 67	5.4	..	.....	.42	.99	.....	.....	.....	.....	30	25	.....	24	31	.14	.10
04 25 67	6.3	..	.....	.27	.79	.....	.....	.....	.....	29	24	.....	21	26	....	.04
07 24 67	4.52	20	.....	.34	.00	.....	.....	.....	.....	33	27	.....	28	16	.04	.02
09 25 67	4.60	12	.....	.24	.79	.....	.....	.....	.....	35	29	.....	22	25	.11	....
10 25 67	3.6	11	.....	.....	.....	.....	.....	.....	.....	37	30	.....	24	22	....	.02
11 29 67	4.60	6	.....	.....	.....	.....	.....	.....	.....	33	27	.....	24	25	....	.00
12 21 67	5.87	4	9.1	.....	.....	18	4.4	23	4.7	8	6	42	26	35	.26	.05
01 25 68	6.37	2	.....	.09	1.0	.....	.....	.....	.....	39	32	.....	28	24	.10	.04
02 05 68	6.7	..	9.0	.....	.....	17	4.2	22	4.6	25	20	40	26	25	.16	.02
04 22 68	4.90	..	.....	.23	.00	.....	.....	.....	.....	34	28	.....	25	18	.09	.00
06 06 68	6.3	..	8.0	.....	.....	20	4.2	24	5.0	36	30	37	27	28	.10	....
06 06 68	6.3	23	.....	.23	.99	.....	.....	.....	.....	35	29	.....	26	2.0	.00	.00
08 23 68	2.8	24	.....	.04	.00	.....	.....	.....	.....	29	24	33	22	18	.03	.00
10 16 68	3.7	14	.....	.16	.79	.....	.....	.....	.....	34	28	35	27	29	.13	.00
11 18 68	19	11	.....	.10	.00	.....	.....	.....	.....	16	13	17	11	8.0	.14	.09
07 25 69	4.01	..	.....	.22	.....	.....	.....	.....	.....	32	26	42	28	31	.04	.04
01 02 69	7.2	..	.....	.25	.95	.....	.....	.....	.....	35	29	43	31	.....	.03	.00
10 24 69	4.36	..	8.3	.....	.....	18	3.9	26	5.2	34	28	46	28	38	.00	....
01 26 70	9.57	..	.....	.....	.....	.....	.....	.....	.....	39	32	.....	46	41	....	....
08 24 70	5.4	..	6.2	.22	.00	15	3.5	19	3.6	20	.....	30	22	17	.10	....
11 03 70	3.7	16	9.0	.50	.00	17	4.1	23	4.0	24	20	42	28	26	.20	....
12 28 70	4.6	..	.....	.18	.....	.....	.....	.....	.....	38	31	38	42	24	.05	.05
03 30 71	6.7	10	8.4	.4	1.2	20	4.7	26	5.6	38	31	47	33	31	.07	....
01-3097.00 SEAFORD CREEK AT SEAFORD (404000N0732857)																
02 20 68	.62	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	.....	....	....
05 06 68	.35	..	.....	.12	.41	.....	.....	.....	.....	32	26	.....	26	24	.05	.02
01-3098.00 SEAMANS CREEK AT SEAFORD (403956N0732937)																
06 15 67	.9	..	.....	.16	.14	.....	.....	.....	.....	29	24	.....	18	5.3	.07	.01
05 06 68	2.2	..	.....	.30	1.1	.....	.....	.....	.....	47	39	.....	24	24	.08	.04
01-3099.50 BELLMORE CREEK NEAR BELLMORE (404043N0733058)																
01 18 67	3.9	5	.....	.07	.00	.....	.....	.....	.....	34	28	.....	24	31	.02	.02
01 27 67	3.3	8	.....	.16	.83	.....	.....	.....	.....	40	33	.....	24	26	.07	.07
02 14 67	1.6	..	8.1	.31	.85	21	3.0	27	5.6	14	11	44	28	34	....	....
03 10 67	6.64	0	.....	.11	.48	.....	.....	.....	.....	44	36	.....	31	25	.04	.03
04 03 67	6.46	..	.....	.37	.55	.....	.....	.....	.....	39	32	.....	35	25	.14	.10
04 22 66	3.15	..	8.4	.82	.82	21	3.8	22	5.3	16	13	42	25	36	....	....
11 20 67	3.44	..	.....	.11	.....	.....	.....	.....	.....	35	28	.....	28	32	....	.04
12 15 67	5.0	6	8.1	.....	.....	21	3.3	24	5.3	21	17	40	28	39	.41	.05
01 29 68	4.66	8	.....	.16	1.2	.....	.....	.....	.....	37	30	.....	35	30	.04	.03
02 02 68	4.7	..	8.3	.....	.....	22	3.5	29	6.0	16	13	45	33	40	.04	.00
04 16 68	4.5	16	.....	.21	.99	.....	.....	.....	.....	38	31	.....	31	33	.02	.00
04 30 68	4.16	16	.....	.18	1.0	.....	.....	.....	.....	35	29	.....	29	31	.05	.00
06 07 68	3.5	..	6.5	.....	.....	27	3.5	26	6.0	40	33	44	30	32	.11	....
08 23 68	3.5	23	.....	.06	.00	.....	.....	.....	.....	17	14	39	29	34	.07	.02
10 16 68	3.72	19	.....	.16	.22	.....	.....	.....	.....	39	32	43	29	34	.03	.00
01 03 69	4.92	..	.....	.14	.00	.....	.....	.....	.....	35	29	45	31	37	.02	.00
03 06 69	5.32	..	.....	.06	.14	.....	.....	.....	.....	35	29	51	52	22	.07	.00
11 13 69	3.41	..	8.6	.....	.....	23	3.0	28	5.8	37	30	48	31	39	.00	....
01 29 70	5.01	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44	27	....	.03
06 03 70	4.9	..	13	.....	.....	24	3.1	30	5.7	38	31	46	34	3.9	.07	....
11 03 70	3.4	..	8.2	.5	.7	23	3.1	29	6.0	30	25	.....	.....	.....	.30	....
03 17 71	6.21	10	.....	.18	.91	.....	.....	.....	.....	43	36	46	39	27	.10	.06
04 20 71	5.7	15	7.0	.5	1.2	22	3.4	32	5.8	44	36	46	35	26	.05	....

MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO MHOS/CM AT 25°C)	PH	LOAD, IN POUNDS PER DAY				AN- AL- Y- S- T
						NI- TRATE (NO3)	MBAS	TOTAL PHOS- PHATE (PO4)	DIS- SOLVED SOLIDS	
.86	233	70	....	320	6.7	.....	.....	.....	.....	2
.41	158	57	....	.....	6.8	272	9.3	5.2	3580	2
.22	160	....	....	252	5.3	.....	5.2	.....	3760	2
.44	142	56	....	270	6.8	113	4.5	.51	1450	2
.....	175	69	30	310	6.2	.....	.....	.....	.....	1
.18	....	90	....	225	6.4	.....	.....	.....	.....	2
.86	....	64	....	260	7.5	1.1	.28	.02	.....	2
.72	....	....	....	.....	6.4	242	11	.....	.....	2
.40	146	50	40	211	6.2	278	9.3	.....	3390	1
.77	....	56	....	270	6.5	366	15	1.2	.....	2
.77	186	56	....	280	6.2	401	13	2.8	3110	2
.77	170	60	....	240	6.4	458	14	.73	3120	2
.....	174	54	45	266	5.8	532	.....	.....	3190	1
.88	232	62	....	315	6.3	903	26	4.1	6760	2
.67	164	57	....	.....	7.1	884	23	1.4	5570	2
.63	190	62	....	290	7.6	390	15	.98	4630	2
.69	197	64	....	305	6.9	620	17	2.7	4890	2
.69	192	64	....	300	6.5	427	13	.39	3730	2
.77	198	62	....	320	6.9	620	19	.....	4910	2
.58	167	63	56	291	6.3	1110	18	8.2	5290	1
.77	....	66	....	250	7.4	825	26	3.4	.....	2
.44	170	60	39	281	6.7	903	16	5.8	6140	1
.63	198	64	....	290	6.8	476	17	2.4	5230	2
.44	171	67	38	301	6.5	952	15	3.4	5810	1
.56	211	66	....	305	6.9	68	19	.....	7170	2
.44	....	54	....	310	6.8	272	6.6	.45	.....	2
.65	195	62	....	310	6.6	579	13	2.6	3890	2
.22	79	40	....	125	6.4	820	22	14	8100	2
.51	....	72	....	250	7.2	670	11	.86	.....	2
.61	203	68	....	300	6.5	.....	24	1.2	7880	2
.41	173	61	33	290	6.8	894	9.6	.00	4070	1
.69	273	82	....	.....	... 2120	36	.....	.....	14100	2
.25	138	52	36	232	6.5	492	7.2	2.19	3990	1
.45	202	60	40	298	6.3	516	8.9	3.4	4010	1
.35	230	72	....	390	7.1	591	8.6	1.2	5670	2
.3	206	198	38	328	6.6	1112	11	2.5	7390	1
.54	291	....	....	400	5.4	.....	1.8	.....	973	2
.58	230	86	....	335	6.9	45	1.1	.09	434	2
.29	133	44	....	.....	6.6	26	1.4	.34	646	2
.41	210	86	....	325	6.9	285	4.9	.95	2490	2
.56	181	70	....	270	6.5	652	12	.42	3810	2
.51	190	72	....	280	6.5	463	9.1	1.2	3380	2
.....	198	65	54	306	5.9	293	.....	.....	1710	1
.56	227	77	....	360	7.1	895	20	1.4	8130	2
.44	256	74	....	370	6.5	871	15	4.9	8920	2
.4	194	68	55	289	6.0	612	6.8	.....	3300	1
.43	199	74	....	338	7.2	594	8.0	.74	3690	2
.39	191	66	49	309	6.3	1050	10	11	5150	1
.43	218	79	....	390	6.8	754	11	1.0	5480	2
.32	203	70	56	331	7.0	1010	8.1	1.0	5150	1
.36	213	72	....	360	7.0	801	8.7	.48	5170	2
.39	211	74	....	340	6.8	696	8.8	1.1	4740	2
.39	204	82	49	331	6.8	604	7.3	2.1	3850	1
.35	227	72	....	340	6.5	642	6.6	1.3	4290	2
.41	....	78	....	350	6.7	682	8.2	.60	.....	2
.30	....	82	....	300	6.5	982	8.0	.53	.....	2
.35	248	76	....	425	6.6	631	10	2.0	7120	2
.29	191	70	40	310	6.9	717	5.3	.00	3510	1
.32	259	84	....	410	6.9	730	8.6	.81	7000	1
.24	201	19	30	346	6.9	44	2.7	.8	2260	1
.36	221	70	46	358	6.6	583	6.6	5.5	4030	1
.25	219	78	....	390	6.1	903	8.4	3.3	7323	2
.2	203	69	32	357	6.9	795	6.1	1.5	6300	1

TABLE 4. -- CHEMICAL ANALYSES OF WATER FROM STREAMS IN SEWERED AND UNSEWERED AREAS,
SOUTHERN NASSAU COUNTY, LONG ISLAND, N.Y., 1966-1971 --CONTINUED

DATE OF COLLECTION	DIS- CHARGE (CFS)	TEM- PERA- TURE (°C)	SILICA (SIQ2)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM (NA)	PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	ALKA- LITY AS CACO3	SUL- FATE (SO4)	CHLOR- IDE (CL)	NI- TRATE (NQ3)	TOTAL PHOS- PHATE (PO4)	ORTHO- PHOS- PHATE (PO4)
01-3099.90 BELLMORE CREEK TRIBUTARY AT BELLMORE (404047N0733046)																
04 22 66	.24	13	6.4	.03	.03	27	4.5	24	6.4	36	29	48	28	33	....	....
12 20 66	.5	3	.....	.00	.00	.....	.....	.....	.....	33	27	.....	22	28	.02	.02
01 18 67	.55	..	.....	.05	.45	.....	.....	.....	.....	50	41	.....	25	25	.06	.02
02 14 67	1.04	..	7.8	.17	.59	26	4.2	27	6.3	35	29	48	30	30	....	....
11 01 67	.91	16	.....	.16	.00	.....	.....	.....	.....	56	46	.....	36	27	....	....
12 15 67	2.8	13	8.7	.....	.....	27	4.2	31	7.3	58	48	54	36	26	.24	.04
02 02 68	1.8	..	8.5	.....	.....	27	4.2	33	7.5	48	39	52	37	28	.00	.00
04 16 68	1.3	..	.....	.21	.55	.....	.....	.....	.....	57	47	.....	38	29	.05	.00
04 30 68	2.32	..	.....	.21	.79	.....	.....	.....	.....	54	44	.....	38	30	.04	.00
06 07 68	1.5	..	6.6	.....	.....	30	4.2	32	8.1	56	46	48	38	29	.01	....
08 23 68	.58	21	.....	.06	.00	.....	.....	.....	.....	30	25	45	32	.....	.05	.04
10 16 68	.39	19	.....	.04	.00	.....	.....	.....	.....	54	44	43	36	30	.07	.00
01 03 69	1.79	..	.....	.21	.00	.....	.....	.....	.....	57	47	51	40	39	.04	.04
03 06 69	.93	..	.....	.14	.00	.....	.....	.....	.....	59	48	54	46	25	.07	.00
07 15 69	.73	..	.....	.....	.00	.....	.....	.....	.....	46	38	51	42	34	.11	.00
10 23 69	.5	..	7.3	.....	.....	31	3.8	38	6.9	58	48	54	43	35	.00	....
01 29 70	2.48	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60	22	....	.10
06 03 70	2.1	..	13	.....	.....	27	3.6	35	6.5	31	26	47	40	35	.02	....
11 03 70	.1	..	5.3	.1	.04	28	4.5	33	6.8	56	46	47	44	22	.16	....
03 17 71	2.39	..	.....	.45	.95	.....	.....	.....	.....	61	50	48	46	31	.07	.07
01-3101.00 NEWBRIDGE CREEK AT MERRICK (403942N0733202)																
02 20 67	.72	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26	.....	....	....
06 15 67	.23	..	.....	.11	.79	.....	.....	.....	.....	49	40	.....	25	20	.10	.02
08 23 68	.20	..	.....	.02	.00	.....	.....	.....	.....	16	13	34	16	36	.18	.14
02 18 70	.98	..	.....	.72	2.2	.....	.....	.....	.....	83	68	56	36	16	.20	.11
01-3101.30 CEDAR SWAMP CREEK AT NORTH MERRICK (404027N0733243)																
09 18 67	.....	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	42	....	.04
01-3101.50 CEDAR SWAMP CREEK NEAR MERRICK (403951N0733240)																
09 18 67	.....	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23	34	....	.02
01-3102.00 CEDAR SWAMP CREEK AT MERRICK (403939N0733224)																
06 15 67	.....	..	.....	.07	.00	.....	.....	.....	.....	37	30	.....	24	27	.10	.01
02 19 68	5.31	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	.....	....	....
05 07 68	4.79	..	.....	.12	1.1	.....	.....	.....	.....	40	32	.....	21	21	.05	.00
02 18 70	7.11	..	.....	.40	.99	.....	.....	.....	.....	49	40	31	52	24	.09	.02
01-3105.00 EAST MEADOW BROOK AT FREEPORT (403956N0733413)																
04 22 66	.91	..	6.8	.....	.92	18	3.9	32	4.1	10	8	38	47	22	....	....
10 27 66	2.69	10	.....	.11	.95	.....	.....	.....	.....	29	24	.....	59	19	.06	.02
12 20 66	1.1	3	.....	.47	.71	.....	.....	.....	.....	20	16	.....	33	34	.10	.01
01 18 67	1.14	..	.....	.09	1.1	.....	.....	.....	.....	28	23	.....	67	22	.03	.03
02 14 67	1.1	..	8.0	.87	1.1	20	4.0	60	4.7	18	15	46	90	8.0	....	....
03 31 67	2.8	14	.....	.30	.91	.....	.....	.....	.....	37	30	.....	82	18	.08	.04
04 25 67	2.8	..	.....	.24	.00	.....	.....	.....	.....	30	25	.....	46	22	....	.03
10 02 67	1.48	..	.....	.16	.59	.....	.....	.....	.....	32	26	.....	47	24	....	.02
10 25 67	2.10	..	.....	.24	.90	.....	.....	.....	.....	34	28	.....	46	20	....	.05
11 17 67	2.65	7	.....	.07	.....	.....	.....	.....	.....	24	20	.....	26	36	....	.00
01 29 68	4.37	6	.....	.13	1.1	.....	.....	.....	.....	30	25	.....	62	22	.15	.04
04 19 68	5.2	..	.....	.21	.00	.....	.....	.....	.....	32	26	.....	38	29	.04	.00
06 03 68	7.5	..	.....	.42	.95	.....	.....	.....	.....	35	29	.....	62	25	.08	.05
06 07 68	5.6	..	7.6	.....	.....	23	4.5	44	4.7	32	26	41	64	20	.08	....
08 15 68	3.03	23	.....	.08	.00	.....	.....	.....	.....	32	26	40	47	22	.03	.00
10 16 68	2.8	18	.....	.12	.79	.....	.....	.....	.....	28	23	39	58	20	.04	.00
05 07 69	8.79	..	.....	.....	.....	25	5.1	36	5.4	26	21	57	43	36	.00	....
07 14 69	12	22	.....	.37	.00	.....	.....	.....	.....	26	21	40	42	28	.08	.04
10 23 69	5.54	..	6.8	.....	.....	22	3.9	32	4.7	18	15	43	41	40	.00	....
2 12 70	14.5	..	.....	.06	1.2	.....	.....	.....	.....	28	23	47	38	33	.25	.03
03 12 70	8.9	..	.....	.02	.00	.....	.....	.....	.....	26	21	45	67	35	.09	.07
08 24 70	18	..	3.0	.42	.01	10	2.0	8.9	1.6	20	16	13	13	6.9	.26	....
11 25 70	2.1	..	7.1	.08	.7	19	3.4	33	3.6	20	16	33	65	10	.07	....
12 22 70	2.8	..	6.6	.2	.7	19	3.3	48	3.5	19	16	35	74	7.8	.10	....
03 22 71	6.0	9	6.1	.5	.8	18	3.8	48	4.0	33	27	35	74	14	.10	....

MBAS	DIS- SOLVED SOLIDS	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS	SPECIFIC CONDUCT- ANCE (MICRO MHOS/CM AT 25°C)	PH	LOAD, IN POUNDS PER DAY				A N A L Y S I S T
						NI- TRATE (NO3)	MBAS	TOTAL PHOS- PHATE (PO4)	DIS- SOLVED SOLIDS	
.5	217	86	56	334	6.5	43	.65	.....	281	1
.32	208	82	.....	300	6.3	76	.86	.05	561	2
.56	198	86	.....	300	7.0	74	1.7	.18	587	2
.....	204	82	54	336	6.5	168	.....	.....	1140	1
.58	.....	88	.....	410	7.0	132	2.8	.....	.....	2
.40	227	84	37	392	6.8	393	6.0	3.6	3430	1
.40	230	84	45	387	6.9	272	3.9	.00	2230	1
.50	246	86	.....	.....	7.2	203	3.5	.35	1720	2
.51	245	88	.....	410	7.1	375	6.4	.50	3070	2
.41	224	92	46	390	7.1	234	3.3	.08	1810	1
.21	232	78	.....	350	6.2	.....	.66	.16	726	2
.43	245	84	.....	386	7.1	63	.90	.15	515	2
.40	.....	90	.....	425	6.7	376	3.9	.39	.....	2
.35	266	96	.....	425	6.8	125	1.8	.35	1330	2
.39	257	86	.....	390	7.5	134	1.5	.43	1010	2
.29	226	93	46	380	7.2	94	.78	.00	609	1
.39	.....	88	.....	490	7.0	294	5.2	1.3	.....	2
.27	220	82	57	382	7.1	918	.3	.5	5770	1
.35	247	88	42	400	6.7	12	.2	.09	132	1
.30	251	94	.....	400	6.5	399	3.9	.90	3349	2
.67	235	.....	.....	395	5.6	.....	2.6	.....	913	2
.90	235	90	.....	.....	6.5	25	1.1	.12	292	2
.24	.....	60	.....	240	6.0	39	.26	.19	.....	2
.65	263	104	.....	460	6.9	84	3.4	1.0	1390	2
.59	.....	100	.....	375	6.7	.....	.....	.....	.....	2
.48	212	78	.....	315	6.8	.....	.....	.....	.....	2
.59	203	71	.....	.....	6.7	.....	.....	.....	.....	2
.44	201	.....	.....	340	5.4	.....	13	.....	.....	2
.48	183	72	.....	300	6.9	542	12	1.3	4730	2
.30	254	80	.....	410	6.9	920	12	3.4	9740	2
.40	198	61	53	326	5.9	108	2.0	.....	972	1
.61	242	72	.....	410	6.7	276	8.8	.87	3510	2
.77	224	75	.....	330	6.4	202	4.6	.59	1330	2
.63	240	72	.....	360	6.5	135	3.9	.18	1480	2
.....	289	66	52	490	6.8	47	.....	.....	1710	1
.45	.....	66	.....	420	6.8	272	6.8	1.2	.....	2
.56	257	77	.....	.....	6.5	332	8.4	.45	3880	2
.30	.....	80	.....	370	6.8	192	2.4	.16	.....	2
.36	224	76	.....	360	6.7	226	4.1	.57	2540	2
.72	228	76	.....	355	7.0	514	10	.....	3260	2
.50	249	81	.....	400	6.8	518	12	3.5	5870	2
.50	.....	82	.....	380	6.8	813	14	1.1	.....	2
.31	267	80	.....	.....	6.7	1010	12	3.2	10800	2
.29	229	76	56	411	6.8	604	8.8	2.4	6920	1
.24	230	72	.....	360	6.3	360	3.9	.49	3760	2
.30	257	76	.....	390	6.8	302	4.5	.60	3880	2
.34	236	84	62	385	7.2	1710	16	.00	11200	1
.34	.....	72	.....	335	6.7	1810	22	5.2	.....	2
.25	192	71	56	302	6.3	1190	7.5	.00	5740	1
.34	263	82	.....	425	6.3	2580	26	20	20500	2
.23	.....	84	.....	420	6.8	1680	11	4.3	.....	2
.09	69	33	16	127	6.5	666	8.4	25	5460	1
.14	179	62	45	316	7.3	113	1.6	.8	2010	1
.2	225	61	46	402	6.9	117	3.0	1.5	3380	1
.16	245	60	33	398	6.8	450	5.1	3.2	7880	1

